

Contents

Sl. No.	Title	Page
1.	Perspectives in Teacher Professionalism in India J. S. Rajput	1
2.	The Changing Role of Teachers: Emerging Issues M. S. Khaparde	25
3.	In-service Education and Training of Teachers: Issues, Strategies and Perspectives Onkar Singh Dewal	50
4.	Pedagogy of Value Oriented Education D. K. Bhattacharjee	68
5.	Emerging Issues in Evaluation and their Implications for Teacher Education Sarla Rajput Mamta Agrawal	95
6.	Perspectives of ICT in Teacher Education Utpal Mallik	113
7.	Teacher Commitment K. Walia	133
8.	Current Perspectives, Emerging Issues and Strategies in Primary Level Pre-service Teacher Education M. A. Khader	146

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Perspectives in Teacher Professionalism in India

J.S. Rajput

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Perspectives in Teacher Professionalism in India*

J S. Rajput

Five decades of educational endeavours in a developing country, struggling to universalize elementary education, initiating large scale educational expansion and keeping an eye on the quality would promise a fascinating professional journey. Consequently teacher professionalism in India, in the post independence period, is characterized by sustained initiatives and efforts to empower teachers. The inherent legacy of an alien system is now gravitating towards decentralization, contextualisation and community process. The paper elaborates on the concept of professionalism by referring to and examining various expert opinions and explains parameters of professionalism some of which need priority strengthening in the Indian teacher education system. Policy initiatives taken to promote professionalization in teacher education since promulgation of National Education Policy in 1986 have been surveyed. The focus rests on problems relating to professionalization of school teachers including para teachers and mentions some of the strategies taken as corrective measures. It describes post reform developments and the state of art relating to prevailing criteria of induction of young aspirants to the profession of teachers. It emerges that information communication technology, globalization and new advances in pedagogy have elements of both threat and opportunity for teacher professionalism

Teacher and the Progress of Education

The idealized image of the teacher and the role expectation evolved over the centuries in India have survived amongst the popular cultural levels, though the place and nature of inter-linkages of education system with other social systems were altered by the alien rulers. About two centuries ago, the structure and content of Indian education and its accessibility were comparable to the free nations of Europe. It was not state controlled (Dharampal, 1980; Nurullah and Naik, 1964). The education system was legitimized by religion(s) and served the stratified system. Teacher¹ (or

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Guru) was equated with mother and father and all the three were revered as gods. Teaching was respected and supported as a profession. Supporting education was considered as a pious act, akin to the worship of god. Communities and rulers supported schools managed by teachers and community at the local level. The institutions of higher levels of education were autonomous and were maintained by charities by rich and ruling classes (Mookerji, 1960). There was no separate training of teachers. Most of the students of higher education ended up as teachers and the best amongst them joined higher education and learnt to teach. Majority of the teachers in higher levels of education continued their studies and reflections. Teachers enjoyed high levels of professional autonomy (Dharampal, 1980: Mookerji, 1960).

Colonial rule over greater parts of the Indian subcontinent and subsequent direct rule under the distant imperial power however led to the establishment of a bureaucratized education system by the turn of nineteenth century. For the first time in the Indian society an education system with centralized control over the curriculum and teacher supply was established resulting in standardized procedures of 'instruction' in the schools. The alien rulers were not committed to mass education. The products of education, by and large, were meant for subordinate positions in the government and municipal administration. Hence access to education became selective and the new education system became a major mechanism to select and certify young people as eligible for further education or for public service or both. It necessitated the introduction of public examination system based on common curriculum. The new system was characterized by selection function, using the criteria of mastery of European History and English language and literature through common external examination, and curricular practices suited to develop obedient and subservient individuals. Since most of the teachers recruited were Indians, the alien rulers did not trust them and hence the traditional professional autonomy of the teacher was taken away. Teacher became a salaried employee, governed by norms established by civil administration akin to any other clerical or inspectorial cadre. In nutshell, education became state controlled and served the interests of the alien rulers. (Nurullah and Naik, 1964: Mukherji, 1964)

During the freedom struggle, Mahatma Gandhi's philosophy inspired an indigenous system of education. By education he meant 'an all round drawing' out of the best in the child and the man - body, mind and spirit" An important emphasis in Gandhi's model, as Clarke(2001) points out, in keeping with the Indian ethos was the moral expectations from teachers. In contrast to previous models, teachers were required to be honest and virtuous. An additional objective in the Gandhian scheme of teaching of a craft was its function as an equalizer within Indian society.

Academic fraternity in India traces the origin of teacher training as it exists today to the year 1793, when the Danish Missionaries started a few training schools called Normal Schools in Serampore in West Bengal (Adaval et al, 1984). But the growth and development of teacher education in India in the post-independence era effectively began in mid-sixties and the National Policy of Education (1968) recognized the importance of teacher training in improving school education. The Constitution was amended in 1976 to make school education the joint responsibility of both State and Central Governments. At the same time expansion of secondary education created demand for teachers with university degrees. The rapid expansion of secondary education was followed by the expansion of teacher education with a time lag. A large proportion of teachers during the early decades did not possess professional qualifications. However, the percentage of untrained teachers which was 41.2 percent in the year 1950-51 came down to 10.19 percent in the year 1990-91. Similarly the percentage of untrained teachers in secondary schools which was 42.69 percent in the year 1950 has come down to 9.9 percent presently.

It is paradoxical that in the developed countries like United States of America, United Kingdom and in other European countries, the educational reforms and State interventions from late eighties onwards tended to erode the historically evolved teacher and institutional autonomy. The *Times Educational Supplement* (April 1997) in a survey of 1000 teachers concluded:

Morale of Britain's staff rooms has hit rock bottom. Teachers are feeling disillusioned, demoralized and angry at being forced to carry out unpopular government's policies while being constantly blamed for society's ills (quoted in Hargreaves and Fullan, 1998.):

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Marilyn et al (1992) also came to the same conclusion based on the evidence, which suggests:

"... most teachers have had to change their teaching approach, their classroom practice, and their perception of their professional role in ways they would not have chosen for themselves resulting in pressure of time, intensification of work load, and loss of satisfaction in the child centered aspects of the job. There is evidence of loss of autonomy and a certain amount of demoralization..."

In India, educational reforms introduced through new policy and programmes have emphasized decentralization, contextualization and process orientation. Torres (2000) mirrors the ambiguous perception of the teachers' functions in the context of the policies of educational change of Latin America, which is fairly applicable to the approach and mind-set of policy makers and managers of educational change in the Indian context as well. According to Torres, traditional reforms were dominated by investing in things before investing in people, dualism in perceiving teachers - teachers were both valued at rhetoric level and distrusted and neglected at empirical level. All the ills of the society were blamed on teachers. The same teachers were expected to usher in changes for the better. They were perceived as both antagonists and protagonists of educational and social change. Teachers were not a party to envision reforms, but were expected to implement reforms. Teacher training episodes were ad- hoc and discontinuous, perceived as a requirement of reforms and not as continuous professional development of teachers.

"... in other words, training viewed as an ad hoc means to an end, an activity which is actually carried out and even planned when the reform package is ready and even already underway; a corrective and rehabilitating, representing a perennial challenge to teachers' knowledge, its validity and its legitimacy" (Torres, 2000)

Conceptualizing Teaching as a Profession: The State of Art

It has been very well argued that the possession of specialized knowledge is the defining characteristic of a profession (Cullan, 1978; Shils, 1978) and that the volume of such knowledge available to each profession contributes to recognized

status distinctions among the profession (Houston, 1990) The competence to perform professional roles well and effectively, as Dhar (1996) points out, is one of the important aspects of professionalism. Professional acumen is perceived as something worthwhile and contribute to society's well being. The classical work of Liberman (1956), on ' Teaching as Profession' in the context of United States further lists the characteristics of an occupation, if it has to be considered as a profession as follows: a unique, definite and essential social service; an emphasis upon intellectual techniques in performing its service, a long period of specialized training, a broad range of autonomy for both individual practitioners and for the occupational group as a whole; accountability: service to be rendered from the basis and not the economic returns; a comprehensive self-governing organization of practitioners and a code of ethics This has been further examined operationally by Sockett (1990)

In pragmatic perception of the people, teaching at all levels invariably boils down to transmission of bounded textbook knowledge Popular images of classroom transactions appear to be uniform irrespective of variation in contexts, be it elementary or secondary school, rural or urban, mono-grade or multi-grade. Thus, the service provided by the teachers is generally considered mechanical and routine devoid of high order of intellectual inputs Conceptual clarification on the status and characteristics of the occupation of teaching to be considered as a profession eludes unanimity Remuneration, social status, autonomy and service motive are considered essential ingredients. Distinctions have been made on how professionalisation can take place leading to high quality of services rendered, which in fact, is termed as professionalism (Sockett, 1990)

It would be difficult to say that potentially relevant knowledge base of teaching has not been properly codified and rendered useful in a format that would be easily accessible to the practitioners. Making an observation about the Indian scene Rajput (1998) points out that the vigour in the teacher preparation programmes has often been considered inadequate even by the public and parents This lack of 'ecological validity' (Hargreaves & Fullan, 1992) which has been for long recognized as weak has been pointed time and again in the Indian official documents. 'The system still

prepares teachers who do not necessarily become professionally competent and committed at the completion of initial teacher preparation programmes' (NCTE, 1998). Shulman (1987) has identified seven types of knowledge as relevant in teaching profession, namely knowledge of educational ends, purposes and values and their philosophical and historical grounds; content knowledge; general pedagogical knowledge; pedagogical content knowledge; curriculum knowledge; knowledge of learners and their characteristics; and knowledge of educational contexts. Particularly the pedagogical content knowledge has emerged as an important aspect of teaching profession in recent years (Darling-Hammond 1999)

A sufficient degree of autonomy, presence of a collegium and self-governance are also missing (Levine, 1988). Levine argues that for teaching to become a self-governing profession, it must have a "structured induction experience conducted under the supervision of outstanding practitioners who can and will attest to the competence of new inductees to practice". Noddings adds the caring dimension to the commonly discussed competence dimension. The domain of moral life and civility in classrooms is equally important as compared to the competence in subject matter and finds teacher education failing on both these counts (Noddings 1999).

According to Langford (1978), a profession is,

"a social phenomenon in that its members see themselves as members of a social group. In the case of a profession, however, it is not sufficient for its members to see themselves as a profession. They must also be recognized as a profession by the rest of the community.

The classical image of a professional teacher was derived from the functional perspective of the sociology of profession in the 1960's. From such tradition, professional teachers are presumed to have the characteristics such as: teaching as a social function positively disposed to student welfare and satisfy professional standards (Choi, Jocelyn, Pik Lin, 2001).

Hargreaves (2001) has precisely analysed the trends in understanding professionalism: "Outside education, professions have been represented theoretically in the image of those who belong to them and advance their interests, as having a strong technical culture with a specialized knowledge base and shared standards of

practice, a service ethic where there is a commitment to client needs, a firm monopoly over service, long periods of training, and high degrees of autonomy (Etzioni, 1969). Larson (1977) identifies the criterion of autonomy as a crucial one that helps distinguish professional from proletarianized work. Johnson (1972), however, takes many of these classical criteria of professionalism to represent ideologies of self-promotion rather than realities of practice where professionals' self-interest are often privileged over those of their clients. Friedson (1994) argues that common-sense discourses of professionalism and behaving like a professional have been captured by managerialism as a way to control white-collar workers. Meanwhile, Schon (1987) has recast professional action as comprising distinctive, reflective and practical judgements, rather than esoteric knowledge. Hence only technical/rational, skill driven task is not the essential characteristic of any profession. If so, the occupation of minister under the Christian institutions also becomes a non-profession. However, ministering has always been treated as profession all over the world. Hence, *instead of task related factors, it may be better to examine the vital nature of the service for the survival of individuals and societies, higher order of intellectual investment, reasonably long duration initial preparation, constant up-gradation of knowledge, status and remuneration commensurate with the importance of service, self regulation at individual and collective level of practice etc.* can be considered to treat an occupation as profession.

The Indian Scene

While most of these characteristics are shared by a very few professions, the occupation of teachers rarely exhibits any or all of the above in most of the countries' context all over the world. However, in India the process of professionalization has been initiated to shape, at least, the more relevant characteristics of the profession, i.e. preparatory education, arrangements for professional up-gradation of the practitioners, reasonable amount of autonomy, active participation of the professional organizations and guilds in setting standards and remuneration in commensuration with the degree of importance of the service to the society.

In India before the advent of British rule, teaching was considered as a profession. Again, the teacher was not a paid servant of the government, but was a charge on the local population. According to low status to the Indian teacher was the contribution of hidden agenda of the colonial state (Kumar, 1991). Subordination of education to religion and social stratification apart, teachers with various nomenclatures, enjoyed high level of professional autonomy. Either on the initiative taken by the community to meet its educational needs and/or on the part of individuals to render educational service, the schools at elementary level used to be started in communities. Sometimes, rich families would invite a scholar to teach their wards. The community was providing livelihood support to the teachers. Centres of higher learning used to be the home of a learned person, who took charge of the young scholars and taught them not only the scholastic curriculum but also moral and ethical life styles.

The system transplanted from Britain and its subsequent modifications through state control and the neglect of professional aspects of teaching occupation undermined the further evolution of the teaching profession beyond what it was before the intrusion of the colonial rule. In spite of the span of over two centuries, the popular sentiments and the cultural image of teachers persist even today. The National Policy on Education (1986 & 1992) accords professional status to the teaching profession. It is important to treat teaching as a profession so that social action can be initiated to change the present orientation of 'training' a teacher. The central issues relating to professionalization of teaching revolve around recruitment of students for teacher preparation, improvement of the capacity and competence of teachers to provide better service through in-service learning, code of ethics and maintenance of status of teachers commensurate with their service to the society.

The policy discourses insisted on teachers with professional qualification from the very beginning. However, at the practice level, this is being met partially and presence of teachers with specialized training is not uniform in all regions of the country (Walia, 2001). However, it is the chasm between teacher education and teacher practice that often makes much of teacher education dysfunctional. Most of the

knowledge and recommended practices emphasized by the training draw heavily upon the knowledge base of the western developed countries. The university departments for teacher education work towards interpreting the received knowledge and practices from the West (Altbach, 1977). Hence teacher training tends to become theoretical and does not match with the realities. Studies in mid-eighties have revealed that teacher educators and student teachers feel dissatisfied with the practice part of secondary teacher education courses and opine that the emphasis is more on theory (Natarajan, 1984; Deo, 1985; Bhatia, 1987). A recent study on the teacher education curriculum in four large southern states of India revealed that the teacher education curriculum in the university departments have not changed much and the structure and guidelines provided by the National Council of Teacher Education have not been incorporated (Kumar, 1996).

The in-service education is being addressed through disconnected initiatives and measures rather than comprehensive approach towards all aspects of the teaching profession. A national study of classroom processes in various parts of the country indicated persistence of such a mind-set among the government officers and teachers involved in the implementation of teacher training in recent years (NCERT, 2000). The study describes a training session organized to familiarize teachers with an innovative approach in developing local specific curricular materials for individualized learning of basic competency and management of learning. The teachers were seen, during most part of the training, just cutting and pasting pictures and textual materials to prepare charts for use in their respective schools from the xeroxed copies of the printed handbook of the previously designed charts. Thus policy analysis needs to be taken keeping in view total education context.

Studies have shown that generally the teachers themselves perceive their job as prescribed in the form of series of procedural routines-open the school, conduct the prayer, engage classes, complete the prescribed syllabus, and conduct periodic tests with a view to prepare the students for high stake examinations (NCERT, 2000; Clarke, 2001). Collectively teachers and their organizations are being associated more effectively in matters of school organization, time allocation, curriculum, and on any

other issue related to teaching and learning. Teacher Organizations tend to work more as trade unions than professional organizations, which need to set standards and safeguard the status and support professional enhancement. This was not the case earlier.

Post –reform Developments and Professionalisation of Teaching

The profound politico-economic changes of eighties, bringing an end to the cold war and collapse of Soviet Union, resulting in ascendance of capitalism had its shadow on various processes of education and teacher education. The developed as well as developing countries started feeling the pressure in the uni-polar world, with market driven economies vying with each other for space in globalized post-modern world (Hargreaves and Lo (2000) have pertinently pointed out that,

“Rather, in constantly changing, self-creating informational society, knowledge is flexible, fluid, ever-expanding, ever-shifting resource. It is not just support for work and production, but the key form of work and production itself. These new ways of generating, processing and circulating knowledge are absolutely central to what many experts now call the learning society or knowledge society. And the role of education and teaching in such society is absolutely vital.

The new professionalism of the teachers calls for committing to the path of lifelong learning by themselves and inspire students in the same direction (UNESCO, 1996)

In pursuance of the National Policy on Education (1986 and 1992), the flow of the resources of Central Government towards priority areas identified in the Policy introduced a new dynamism in the field of education. The unfinished task of universalizing elementary education assumed renewed urgency in the context of the structural reforms. The policy changes and purposeful interventions of the state, at the primary level of schooling have highlighted the need for change at higher levels of schooling as well as in higher education. The policy gave high priority for Universalization of Elementary Education with revised objectives of universal access and enrollment, universal retention of children upto 14 years of age and a substantial

improvement in the quality of education to enable all children to achieve essential levels of learning. National standards for the first five years of schooling were defined under the label of Minimum Levels of Learning (MLL), (NCERT, 1993) Central Government took initial steps to pilot the introduction of MLL through several projects at various places. As a result, MLL got integrated into the curriculum throughout the country. It needed massive reorientation of teachers, which was accomplished by the mid-nineties. Under a centrally sponsored scheme, called Programme of Mass Orientation of School Teachers (PMOST), nearly 1.8 million teachers were trained following a cascade model. The policy expects the standards to be defined for other levels of school education. A revised national curriculum framework for the entire gamut of school education has been drafted to guide the states in revising the school curriculum as envisaged in the National Policy on Education 1986/92 (NCERT, 2000).

The second reform of far reaching consequence was the upgradation of teachers training institutions both at elementary level and also at the secondary level. The new concept of District Institutes of Education and Training² (DIETs) was evolved. One such institution was to function as a resource center for all aspects of teacher education at the district level. These institutions are now functioning in practically most of the districts in India and have been equipped and strengthened in the areas of pre-service education, planning and management, field studies, work experience and educational technology. Similarly for a cluster of districts, one college of teacher education was upgraded either as an Institute of Advanced Studies in Education (IASE) or upgraded as college of teacher education (CTE). While the colleges of teacher education focus on enhancing the quality of pre-service and in-service education at secondary level, the IASEs conduct researches and innovations apart from conducting pre-service programmes.. These play a leadership role in enhancing professionalism.

The third development of critical import is the Constitutional Amendment to enable the State (provincial) governments to enact laws to establish local governments

responsible for development administration including education called Panchayat Raj Institutions at administrative units of Village, Block and District levels. These structural reforms have facilitated concrete and tangible achievement targets through decentralized planning and management

The fourth development is the launching of decentralized planning and implementation of District Primary Education Programme (DPEP) Under this programme the Centre provided major portion of funds required for district specific plans prepared at the district level in addition to what is already being earmarked by the state for primary education under its own plans. The districts are identified by the State governments based on the backwardness measured in terms of female illiteracy and with concentration of vulnerable population segments like economically and socially weaker sections identified in the Constitution of India In-service education is one of the significant aspects of implementation.

In the year 2001 the Government of India has launched a national mission for ensuring free and compulsory education of satisfactory quality for all children upto 14 years of age with a time span of ten years starting from 2001 This approach to education for all is known as 'Sarva Shiksha Abhiyan' (SSA) Here again teacher orientation forms the critical input

Presently, Indian planners are anticipating the future consequences of unprecedented expansion of elementary education and the demand that would be generated for secondary and higher education in the coming decade Simultaneously, the rapid changes in information and communication technology and the impact of globalization are affecting. The implications for teacher education are also emerging fast.

All the above structural reforms and programmes affect the role of and expectations from teachers, both current and future entrants. Such a development has been anticipated by the policy, as it has focused specifically on the issues related with

teachers' role and status and teacher education. The policy intentions, action plan and specific country-wide programmes have raised issues and concerns of teacher education and professionalization of teaching which are at par with the concerns and problems faced in the developed countries. In the developing countries like India, which need to leapfrog to post-modern world without passing through the full path of industrialization and modernization, negotiating global and internal changes, is both a challenge and an opportunity

Induction to Teaching and Teacher Education

The pertinent questions to be asked in relation to teachers' education are: Who should teach? How should teacher be taught? Where and when should teacher education take place? What should teachers be prepared to do? While answering these questions in the context of United States, Griffin (1999) recommends prior academic achievement, candidates' oral and written communication skills, interpersonal skills, willingness to confront and deal with social and cultural complexity, self-awareness and disposition towards reflection, cosmopolitanism, and well-developed social conscience as the personal criteria for identifying in recruiting candidates into teacher education. In a pluralistic society like India, all the qualities identified above are relevant. However, one has to keep in mind the magnitude of the task of the second largest populated country in the world. The enormity of the enterprise in terms of students and institutions with the size of the teacher population can well be understood when one sees the school going population of 6-18 age learners is around 284 million students at the beginning years of 21st century. Again it is around 3.2 million elementary school teachers who are working in 840 thousand schools and around 1.7 million secondary and post secondary teachers from 112 thousand schools (Government of India, 2001). The problem is further compounded by the fact that within the country there are 18 officially recognized languages and hundreds of dialects. Hence the issues of teacher education and professionalization of teaching-occupation need to be discussed in the contexts of manageable units working at the local level, with support from provincial and national institutions. Secondly, the pressure is already on to make economic sector productive and competitive by

integrating modern technologies, especially information and bio-technology. At the same time, the focus on basic sciences and social sciences should not be allowed to blur in the glare of new developments.

In the context of the sheer magnitude of the teacher demand and supply factors operating in the country along with many lucrative occupations attracting intellectual talents, selecting high caliber persons with requisite personal qualities indicating aptitude for teaching becomes a self-defeating task. Hence, the strategy may have to shift to the process of teacher education where opportunities have to be created to develop effectively the required personal qualities among the given set of individuals, irrespective of their intellectual caliber. Thus, it is the process of teacher education which assumes greater importance in the Indian context. The issue of how teacher should be educated refers to models of teacher education followed in teacher education institutions and university departments

Teacher education in India suffers from the mind-set of 'training' rather than educating teachers to become professionals. Nomenclature of teacher education institutions has changed from the colonial 'Teacher Training College' to 'College of Teacher Education'. However, the institutions preparing teachers for elementary education most often are referred to as teacher training institution even today. Teacher certification programmes in India take off with an assumption that the student teachers possess mastery of content and, as such, the focus of teacher preparation revolves around equipping them with theories in the domain of 'pedagogy' with a limited scope for practising the pedagogic skills. Teacher education neglects the learning of the content. The four Regional Institutes of Education (RIEs), forming part of National Council of Educational Research and Training, offer integrated courses spanning four years at the graduation level combining content with pedagogy³

Reviewing the trend of researches on curriculum of teacher education programmes in different parts of India during the period 1983 to 1988, revealed that all studies came to the conclusion that the teacher education curricula prevailing in the

Indian context at different levels do not meet the felt needs (Singh and Malhotra 1991) A study of teacher education programmes in different institutional setting indicate that 'pedagogy' revolves around standardized approaches and methods labeled as Herbartian steps, micro-teaching, lesson planning, simulated teaching and use of teaching aids (Srivastava et al, 1999) The following statement sums up the situation:

“Almost every developing country has an alien system of teacher education. It has been increasingly realized that an indigenous system of teacher education is essential to respond to the specific regional variations and diversities. ..The existing models of teacher education have outlived their utility and capability to absorb the changes taking place Every nation now requires building and ensuring institutional capabilities, individual competencies and training-learning and teaching-learning in training institutions and schools ”

The preparation of primary teachers has not received due attention within the sector of teacher education in India due to its lower status, as it does not come under the purview of Universities. In addition, it suffers from the deficiencies in the form of its isolation from the schools, community and other institutions of teacher education at higher levels (Sheshadri, 2002). With the exception of negligible cases, the teacher educators of elementary teacher education programme belong to the cadre of graduate teachers with Bachelor of Education (B.Ed) qualifications. Historically, B.Ed focuses exclusively on preparing teachers for secondary schools. Hence, the entire teaching perspective gets flawed right in the pre-service teacher education of elementary teachers. Preparing teacher educators exclusively for teacher education of elementary education is a long neglected policy issue.

School curriculum in India has been highly structured in the form of linear year-grades (each grade is called either as standard or class, i.e. like standard I or Class I in different parts of the country) and spiral structure is built across stages. Such a structure requires one teacher to teach one class to satisfy the required learning time. But most of the rural schools do not have one teacher per class. It is not a weakness or paucity of resources which is responsible for such a situation. It is the size of the community that decides the outer limits of enrollment in the school. Neglect of rural contexts in teacher education programmes has also been observed in United States of

America, Canada and Australia (Yarrow, et al, 1999). In the context of India, educators consider the presence of small schools having one teacher to teach more than one 'class' in parallel as an anomaly instead of an opportunity to structure curriculum in a different way. The teacher training based on uniform and rigid curricular structure in the form of year-grades is of little help to the teacher in rural areas. In fact, the professional education provided to prospective teachers entering the profession in a period of rapid changes should focus on variations encountered in the practice contexts. It would be relevant to look at the proposal for clinical-teacher education model for preparing teachers for post-modern world. The clinical teacher teaching model (Griffin 1999) is context sensitive and well connected with ground realities. The model has features that are inter-connected and inter-related and are knowledge based (rather than solely based on conventional wisdom).

Institutional Arrangement of Teacher Education

Where and when should teacher education take place? In the Indian context, teacher education curriculum for secondary school teachers has been in the hands of universities and the teacher education takes place in colleges, most of them affiliated to universities and managed by the state governments or under grant-in-aid by the state governments. There are more than 150 autonomous state universities and some deemed to be universities having their own teacher education curricula. However, the differences across them are marginal and have not changed adequately over the years. The curricula for teacher education elementary school teachers are prepared by the State Council of Educational Research and Training⁴ and the education takes place mostly in government institutes. The policy and executive jurisdiction on all matters of education including teacher education till 1976 rested with state governments. Hence, the recommendations of National Education Commission (1964-66) and their follow up by National Council of Teacher Education, (NCTE) an advisory body in 1973, that brought out broad guidelines in the area of teacher education with respect to curriculum, course duration and structure did not evoke much response.

The NCTE became a statutory body with effect from 1995 with responsibility of laying down norms, standards and guidelines for teacher education and institutions of teacher education, to promote innovation and research and dissemination of knowledge, and to advise the Central government in matters related to teacher education. The statutes require that each and every teacher education institution obtains recognition of the NCTE. It brought out Curriculum Framework for Quality Teacher Education in 1998 (NCTE, 1998). Several new initiatives have been launched as consequence of the effort. One of these is the introduction of a two-year pre-service teacher training course for secondary teachers in Regional Institutes of Education of NCERT (Rajput and Walia, 1998).

Professionalism and Para-Teachers

Apart from initial training, the dimension of continued opportunity for professional development of the working teachers becomes higher priority to bring about educational reforms. However, in some cash strapped states, there has been a tendency to resort to the appointment of para-teachers even in large rural habitations or to fill up vacant positions as the government cannot afford to pay the full salary of a regular qualified teacher. Findings of the case studies of the para-teacher phenomenon in different parts of the country come out with a somewhat mixed picture. The basic issue emerges from two sources. First, the emergence of para-teachers as a solution for the difficulties experienced by the state agencies in finding financial resources for elementary education and not as a solution to the problem experienced by the communities, which is expected to be in control of primary education. The second is the programme specific in-service teacher education in the form of skill specific training. To some, this appears to be a contradiction between policy and practice with respect to necessary conditions for quality education when semi-qualified and untrained para-teachers are given the responsibility of educating children in interior areas. However, as a one-time measure to extend the outreach of universal elementary education to certain areas with specific needs, this appears to be the only alternative and hence, has a justification. In the context of the Professionalization of Teaching, the term para-teaching appears a bit odd. On the other hand, one of the hallmarks of

professionalism is the motive of service and therefore the future potential of local teachers cannot be under-estimated. It requires several conditions, like the communities become empowered to take control of their own elementary schools and strengthening of cluster resource centre manned by effective teacher educators to provide continuous on-site professional support.

Continued professional development, commonly known as in-service teacher education, plays a vital role in the coming years as pre-service education can only provide the basic foundation for following the profession. Among the seven types of knowledge required in the making of a professional teacher as enumerated by Shulman (1987), only the educational purposes, content, general pedagogy can be acquired in the initial training. Pedagogical content knowledge can come from the in-service training during the initial years. The Indian society, being diverse and vast, pre-service training alone cannot anticipate the range of contexts a prospective teacher may face in her/his professional life. The gaps among the parts of the society in their ability to cope with the rapid changes and help the society to become a learning society makes continuous professional development of the teacher imperative. Based on the studies of schools across United States, Newman et al (2000) conclude:

“Professional development for teachers is often recommended as a strategy for school improvement. But professional development has generally failed to improve teaching, because it is usually implemented in ways that violate key conditions for teacher learning. Researches tend to agree that to promote the kind of teacher learning, professional development should concentrate on instruction and student outcomes in teacher specific schools; provide opportunities for collegial enquiry, help and feedback; and connect teachers to external expertise while also respecting teachers’ discretion and creativity. Finally these experiences should be sustained and continuous, rather than short term and episodic.”

Among recent efforts to improve teaching-learning processes in the primary schools in India, a large proportion of time and considerable resources are being spent on in-service education programmes all over the country. But most often they are in the form of training offered to teachers working in wide variety of contexts and are based on common training packages on different aspects of teaching. Different

teachers are given different packages keeping in mind the numbers to be covered under the general head of in-service teacher training and utilize the allocated money without reference to the utility and impact. Among such activity-dense implementation of foreign funded educational programmes, a structure of training institutions has evolved promising great potential in the long run in the form of Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs)

The Task Ahead

Professionalism refers to the internalized code of ethics and commitment among the practicing teachers at collective level. This aspect of the profession also depends upon the organization of practitioners in the form of association. Such professional associations strive to ensure status and emoluments for teachers while assuring the society at large the integrity and commitment of its members. In the Indian context, the association of teachers are taking a broader view of their functions and responsibility. In recent years, several professional associations are emerging strongly as a party to the formulation of educational policies and programmes. This, in tune with government functionaries, non-government organizations and National Level Institutions, can play a very encouraging role in the years to come.

Future prospects for increased degree of Professionalization of Teaching in India are challenging. As it has happened elsewhere in the world, the structural reforms and globalization have threatened the existing arrangement of education and professional practices of teachers, and at the same time, have provided an opportunity for new professionalization. In India, the compulsions of reforms have created opportunities to dismantle the colonial legacies and leapfrog to the post-industrial society. Several enabling developments are in the process of taking roots like decentralized educational management, improved connectivity across the country and also across the globe through revolutionary changes in information technology, large pool of human capital in information technology etc. New structures and approaches are being tried and tested under highly visible educational programmes. It is for the national level professional organizations to change themselves into learning

organizations and also inspire and support the field level organizations to equally become learning organizations to promote, in turn, the building of a knowledge-based learning society.

Notes:

1. The genesis of this statement lies in a Sanskrit verse (an Indian language) verse-“Gurur Brahma gurur Vishnu gururdeva Maheshwarah, Gurudeva parambrahma tasmey Shri gurve namah”.

Here the teacher is meant essentially a spiritual one who is receiving salutation from the Indian trinity – Brahma, Vishnu and Shiva, as he is verily the Supreme Brahman and the embodiment of the Bliss

2. District Institutes of Education(DIETs) were one of the component of a scheme for the restructuring and revitalization of teacher education which arose from the 1986/92 National Policy on Education. As part of the larger movement towards decentralization of educational management, DIETs were charged with improving training of teachers at the elementary level.
3. Interestingly, these four-year programmes of teacher education were started in the early sixties and have remained essentially limited to these institutions, with an exception of four years teacher education course, started in the late nineties by the Delhi University in the area of elementary education.
4. State Councils of Educational Research and Training (SCERTs) are state level agencies preparing the role of conducting research, development and training in the fields of school and teacher education. By way of their functioning, on the one hand they maintain a close contact with a national body like National Council of Educational Research and Training, and on the other, maintain contact with state departments.

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The Changing Role of Teachers: Emerging Issues

M.S.Khaparde

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The Changing Role of Teachers: Emerging Issues

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I. Introduction

Constant changes are being experienced all the world over in the political, social, cultural and economic domains. Globalisation, scientific & technological advances including the developments in information and communication technology (ICT) resulted in taking up critical analysis of their education systems. The major challenges of the 21st Century before the countries of the world are eliminating poverty, ensuring sustainable development and creating lasting peace. It is widely accepted that reforms in education can play an important role in facilitating economic development, overall growth, social cohesion, and peaceful co-existence. Some of the major areas of educational reform include reforms in terms of decentralization of decision making; pedagogical reforms with regard to the content of the curriculum, changes in teaching methodologies with a shift from teacher-centered to learner-centered approach. The most notable consequence of the current and future challenges facing education in the modern world are those related to the teacher's role within a context of accelerating change with regard to the social, economic, cultural and political features of the present age. Every society has now realized the importance of education and believes that would be the only weapon to empower people to lead a meaningful life. They accepted that the countries are not in isolation so is the individual in every society. Education again is expected to play another role of bridging the gaps within and among the societies and communities to living together.

The teacher is the principal agent in implementing educational programmes and appropriately transacting of curricula in the classroom. In the context of the role of the teacher in the Indian Education System, National Policy on Education (NPE-1992) states:

"The status of the teacher reflects the socio-cultural ethos of a society; it is said that no people can rise above the level of its teachers. The Government and the community should endeavour to create conditions, which will help motivate and inspire teachers on constructive and creative lines. Teachers should have the freedom to innovate, to

devise appropriate methods of communication and activities relevant to the needs and capabilities of and the concerns of the community".

Discussions on the role of teachers in a changing world need to take place in the context of the contribution education and teachers can make an accelerating democratic processes. However, for this to be achieved it will be necessary to raise the social status of teachers themselves, to give meaning to their role in the transformation of education and society, and to inculcate a greater understanding, in the general public, of their vitally important contribution and the significant changes that are occurring in their role due to the rapid rate of change and the impact of new parameters influencing their roles. The International Commission on Education for the Twenty-first Century, in its report titled '*Learning The treasure within*'. (UNESCO, 1996) reflects that the quality and effectiveness of any education system ultimately depends on the quality and effectiveness of teachers. one of the key issues which is attracting the attention of all countries is how best to accommodate the changing role and demands placed on teachers, which have implications for their recruitment, training, reward structure and the development of a new teacher profile While referring to the role of teachers in the changing world (Chapter 7) the report states

"The importance of the role of the teacher as an agent of change, promoting understanding and tolerance, has never been more obvious than today. It is likely to become even more critical in the twenty-first century. The need for change, from narrow nationalism universalism, from ethnic and cultural prejudice to tolerance, understanding and pluralism, from autocracy to democracy in its various manifestations, and from a technologically divided world where high technology is the privilege of the few to a technologically united world, places enormous responsibilities on teachers who participate in the moulding of the characters and minds of the new generation. The stakes are high, and the moral values formed in childhood and throughout life become of particular importance. Improving the quality of education depends on first improving the recruitment, training, social status and conditions of work of teachers; they need the appropriate knowledge and skills, personal characteristics, professional prospects and motivation if they are to meet the expectations placed upon them What can society reasonably expect of its

teachers? What are the realistic demands that must be met? What are teachers entitled to in return, in terms of working conditions, rights and status? What type of people can become good teachers, how can they be recruited and trained, and how can their motivation and the quality of their teaching be maintained"

Giving importance to the factor that, "good education requires good teachers." the General Conference of UNESCO (1996) selected "*Strengthening the role of teachers in a changing world*" as the theme for its forty-fifth session. The fact was also considered that there is a great impact on the role of teachers in view of the educational reforms and social/societal changes.

In the present context, the role of teacher is fast changing from a deliver of information to a facilitator of learning, imbibing among students the concept of life-long learning; a teacher of textbooks to a teacher whose lessons are based on up-to-date information and use of non-print resources including ICT and also himself/herself as a learner; a coordinator of group worker to an information manager. The concentration on the teacher's role in participating in school management may lead to an improvement in teacher's views on their status. The internal partnership of teachers with teachers including principals is important in managing educational change most efficiently. Teacher is also a researcher, a manager, an agent of social change, a constructor of knowledge inside and outside the classroom This requires a new type of education where learners in the context of changing global society need new skills. The changing role of teachers within the context of accelerating change with regard to the social, economic, cultural and political features of the preset age; need a new type of motivation, as well as specialized training, coupled with a need for the constant upgrading and modernization of the knowledge, skills, understanding and life-long learning both for the teacher and the pupil. Teacher education programmes are therefore to be restructured based on country's ethos, its unity and diversity, socio-economic structure in order adequately to prepare teachers for their new and more diversified functions in the school and the community. Teachers are expected to prepare their students to live in multicultural societies, to celebrate diversity and to

respect cultural differences. Human mobility and contact have increased. The global village is becoming a reality, and institutes of learning are living examples of it. Teachers are therefore expected to train their students to be tolerant, to fight racism, discrimination, etc. Considering the important role that the teachers play in imparting quality education, it is for the government and the community to create conducive environment, which will motivate and inspire the teacher on constructive and creative lines, so that she provides the young with quality education which makes them lifelong learners and peace-loving citizens who contribute to the development of their societies and the world at large.

The paper discusses the teacher's role in the context of curriculum planning, curriculum development, curriculum transaction including in the multi-grade and multicultural contexts. The concept of teacher-as-researcher has been widely accepted in education. Action research provides teachers with the opportunity to gain knowledge and skill in research methods and applications, and becomes more critical and reflective about their own practice which is discussed here. Effective use of ICT in the teaching learning process has been discussed.

II. Teacher as Curriculum Developer

"A curriculum is a definition of what is to be learned. The origins of the word are from the Latin curriculum, a racing chariot, from which is derived a racetrack, or a course to be run, and from this, a course to study". (Ross, 2000)

The term *curriculum* is used very widely in the literature to refer to instructionally related educational experiences of students. It encompasses educational philosophy, values, objectives, organizational structures, materials, teaching strategies, student's experiences, assessment, and learning outcomes (Leithwood, 1981).

A school curriculum consists of "all those activities designed or encouraged within its organizational framework to promote the intellectual, personal, social and physical development of its pupils. It includes not only the formal programme of lessons but also the "informal" programme of extra-curriculum activities as well as those features which produce the school's ethos such as the quality of relationships, the concerns for equality of opportunity, the values exemplified by the way the school sets about its tasks and the way in which it is organized and managed. Teaching and learning styles strongly influence the curriculum and in practice cannot be divorced from it " (Skilbech, 1990).

Thus, curriculum does not mean only the academic subjects traditionally taught in the school, but it includes the totality of experience that a pupil receives through the manifold activities that go on in the school, in the classroom, library, laboratory, workshop, play-grounds and numerous informal contacts between teachers and pupils. In real sense, the whole life of the school becomes the curriculum, which can influence the life of the students at all points and help in the development of a balanced personality.

Before we discuss the role of teachers in curriculum development, it would be worthwhile to discuss their roles in the curriculum planning – a stage preceding curriculum development. We have seen that curriculum planning involves a series of steps viz. specification of goals, setting curriculum objectives, choice of curriculum models based on certain relevant criteria and selection of curriculum inputs reflecting these criteria and designed on certain specific scheme of studies, determining the suitable transaction strategies and appropriate evaluation scheme. In the process of curriculum planning teachers play some significant role. But the most significant question is: How many teachers can actually participate in this process? Are the existing provisions for teacher participation in curriculum planning adequate and satisfactory? You may have observed that, under the existing arrangements, the involvement of practicing teachers in curriculum planning processes is not significant. It is now recognized that the teachers should be given more extensive and central role in curriculum planning. Apart from curriculum planning, there are other stages

wherein teachers are involved. These are curriculum development, curriculum delivery, and curriculum evaluation or review. The Process of curriculum development (design) normally begins with the task of determining the specific objectives of teaching a particular course of the programme followed by writing content outlines; specification of relative weightages for different content items within a course; in terms of instructional time allocation, selection of the teaching-learning strategies such as classroom teaching, practicals, demonstrations, field work, self-study, group activities, etc., development of instructional material, reading material etc; and specification of evaluation procedures. Here the question arises is what role practicing teachers play in these exercises? Do the schools provide adequate scope and freedom to teachers for carrying out such exercises? The preparation of curricular outlines entail experimental exploration in course formulation, teaching activities as well as in the evaluation procedures

Though from time to time teachers have been consulted in the process of curriculum development, most decisions about curriculum were taken by the experts without any real participation by teachers. It is only recently, due to numerous failures in curriculum implementation, that teachers are being associated with curriculum development and revision. They play important role in planning experiments for students; and producing teaching aids. It has been reported that in countries where participation was more inclusive and where more teachers were engaged in deliberative meetings and in production of materials, there was more genuine adaptation of the programme, and significant changes took place in the classroom. Therefore, teachers' participation is now recognized as an indispensable part of the process of curriculum development. The curriculum demands active efforts on the part of the teacher to bring about more insights, greater knowledge, and increased enthusiasm in the pupils for learning. When teachers do not form part in the process of curriculum change, they would not be inclined in implementing the changes.

The overall responsibility of curriculum development in all countries lies with the Governments. In most countries curriculum development is relatively centralized. The countries like China, Fiji, France, Germany, Indonesia, Japan, Korea, Malaysia,

Philippines, Sri Lanka, and Thailand, all report highly centralized curriculum development process. Though the final decision is made at the government level, the teachers, teacher unions and other stakeholders are consulted before and during the development process. In the countries such as Australia, France, New Zealand and Philippines, systematic inputs from teachers on policy development, training and reviewing curriculum are obtained. In a centrally prescribed curriculum, usually available in terms of textbooks and syllabus, the involvement of teacher in the process of curriculum development is relatively low. In this type of curriculum, the units or divisions of knowledge are strongly bound which have a hierarchical organization and transmission mechanism. In situations where there is more autonomy granted to the schools, teachers are provided the opportunity and responsibility to develop his/her own curriculum, relate it to real life situations, design locally relevant activities, utilize locally available resources and encourage children to bring in their life experiences and relate them to the curriculum. The teacher determines the appropriate material that has to be transmitted and also the pace of learning. The teacher is thus, a designer of activities himself. He/She is not only the implementer of the curriculum as in the centrally sponsored curriculum but its developer as well, in this case.

III. Teacher's Role in Curriculum Transaction

Curriculum delivery generally involves teachers, students and contents of the curriculum. The contents to be learned by the students, are essentially contained in the textbooks, work books, etc. and it is the teacher's responsibility to teach these contents to the students. Curriculum delivery/transaction is a systematic process in which the teacher, students, material, and learning environment, is crucial to successful learning. This perspective of curriculum delivery is usually referred to as the Systems Approach to design instruction. The classroom teaching, which is major component of curriculum delivery, needs to be tailored according to the demands of the reality. In normal conditions, each classroom has at least one teacher with adequate teacher-pupil ratio. However developing countries face the problems of multi-grade and large-classroom settings demanding different strategies of curriculum delivery. Also, the classroom teaching-learning is not merely limited to the use of talk, chalk and board.

Rather, it is being supplemented by audio-video aids, and computer aided instructions. It would therefore, be appropriate to discuss teacher's role in curriculum delivery in Curriculum Delivery in Normal classrooms and in Multi-grade and multi-cultural contexts.

Curriculum Transaction in Normal Classroom

In the beginning the teacher seeks answers to many questions such as: what am I going to teach? How much matter should I include in a particular course unit? What are the contents for each session of the course? How to arrange the topics and sub-topics of the course? Am I going to follow a definite rule, procedure while transacting these topics? Have I allotted sufficient time for each of these topics and sub-topics? What type of methods and media am I going to use? What sort of instructional strategies and evaluation procedures am I going to adopt for teaching these contents? The answers to such questions identify various roles of teachers in curriculum transaction. For instance, certain courses may demand that the whole transaction of the course be done only through fieldwork. Or, even within a course, it may be essential to adopt a judicious combination of different transactional modes such as practical work, classroom lecture, assignments, etc. for the effective delivery of the content units. It may be noted that the adoption of different modes of delivery, places varying demands on the time and the other limited resources available. For example, transacting a content unit through classroom lecture may place very limited demand on time, human resources, etc. However, if the same is to be transacted through a practical exercise, depending on the specific objective, the resource requirement will drastically differ. Similarly, carrying out fieldwork will not only require longer duration of student's involvement but also change the role of a teacher significantly. Any instructional strategy that a teacher adopts in a classroom must conform to his/her personal style of teaching, and the model or models of teaching that he/she follows. For instance, a large group instruction will not appeal to those teachers who prefer to work closely with students. Hence, one should analyse the particular style of teaching and the model that he/she finds most suitable for his/her particular style. A teacher

should be much more open-minded and expand his/her efficiency by using different models of teaching rather than a single model of teaching

As a catalytic agent teacher structures the internal working of classroom and also gives direction to his pupils. The leadership style of teachers such as establishing relationship with students; setting the classroom communication channel, working procedures and rule enforcement supplemented with use of power; denotes the classroom climate for student's learning. However, differences are observed in terms of the way they structure the classroom environment. A competent teacher manages the time available in school most effectively; recognises and provides for individual differences among learners, including children who are gifted as well as those who are weak; organizes and manages teaching and learning through a combination of class, group and individual activities appropriate to the needs of learners, the level of study and the nature of the subject matter; provides a stimulating and effective environment for learning through good class organization and display; and uses the environment and the children's direct experience as a resource for learning

Several studies have shown that there is improvement in the student's achievement when the teaching is well organized and the teachers are absolutely clear about their objectives. Effective learning occurs where teachers clearly explain the objectives of the lesson at the outset, and refer to them throughout the lesson to maintain the focus. The information of the lesson should be structured in such a way that it begins with an "overview" and the main ideas of the lesson are reviewed at the end. Joyce & Showers (1988) noted that the more effective teachers teach the classroom as a whole; present information or skills clearly and animatedly; keep the teaching sessions task-oriented; are non-evaluative and keep instruction relaxed; have high expectations for achievement and relate comfortably to the students with the consequence that they have fewer behaviour problems

Tangyong *et. al.* (1989) identified some desired behavioural attributes of teachers, namely; logical and flexible planning of work; encouraging children to think critically; better recognition of individual differences between children and the range

of ability within classes; encouraging creativity in children; to link learning with living in the community; differentiating the needs and interests of older and younger children; and encouraging co-operation and mutual self-help among them.

According to Scheerens (1992) *structured teaching* is more appropriate to primary schools as it makes clear what has to be learnt, splitting teaching material into manageable units for the pupils, offering these in a well-considered sequence; giving sufficient exercise material; and regularly testing for progress with immediate feedback of the results

In majority of the countries there has been a shift from teacher centred instructions to child centred learning. This also involves encouraging problem-solving, creative thinking, learning to learn, and activity based classroom programmes. "Pupil practice" is enhanced when teachers are sensitive to the learning styles of the pupils and where feasible the teachers identify and use appropriate strategies. In many cases this requires flexibility on the part of the teachers in modifying and adapting their teaching styles. A large number of studies have revealed that there is a strong relationship between **high expectations among teachers and effective learning**. High expectations correspond to a more active role of teachers in helping pupils to learn more and a strong sense of efficacy. Reinforcement is an important element of effective schooling. Good discipline in classroom helps in effective learning. Frequent use of punishment by teacher can create a tense and negative atmosphere affecting attendance and behaviour of the children and thus has adverse effects. On the contrary, praise and appreciation had a positive relation with pupil behaviour and to some extent increase their academic achievement and attainments. Another factor for low achievement is teachers' resistance to the innovations. The new reform programmes demand from the teacher's new teaching techniques, use of different instructional materials and use of different distinguished procedures. One important issue related to the teacher's role in the implementation of curriculum, is learning assessment of the students. A variety of strategies are used to assess students learning which provides feedback to the teachers with respect to the effectiveness of their teaching and also provides students and parents essential information about the

student's progress. Introduction of continuous and comprehensive evaluation and grading system in examinations are the outcomes of researches in the field of examination reforms in the Indian context.

Curriculum Transaction in Multi-grade Schools

Multi-grade schools contain students of different ages and abilities in one classroom, under the direction of one teacher. They take a variety of organizational forms, ranging from a grouping of several formal grades/divisions under the direction of one teacher to a completely non-graded learning environment. Multigrade schools differ from 'traditional' schools where each class is typically made up of a distinct grade with its own teacher and a classroom.

Appropriate pedagogical training and materials are both critical for successful multigrade teaching. As regards approaches to classroom teaching, a multigrade teacher has to know and use effectively the various methods and techniques and strategies to ensure that every child in his or her multigrade class makes satisfactory progress. In the multigrade context the teacher has to make use of greater flexibility in teaching strategies, create congenial learning climate, getting senior pupils to help junior pupils, make groups based on ability, engage some groups in co-curricular activities, adjust available time most effectively, etc. To build successful multigrade schools, teachers need to develop a wide repertoire of teaching techniques and classroom management practices. They require sufficient and appropriate instructional material and physical facilities and local and regional professional support. Students may receive less individual attention, and most often work independently. Student achievement in multigrade schools may be low in comparison to achievement in single grade schools if multigrade programmes are not supported with the required resources and if teachers are not properly trained. Given the limited facilities and other constraints, a teacher in multigrade context plays a very important and solitary role in making his/her classroom instruction effective

Curriculum Transaction in Multicultural context

Multiculturalism has made the educationists to think in global and multicultural perspectives. We find racial, ethnic, cultural, and language diversity and pluralism in the world today. Hence, it is important that diverse cultures be reflected in the school, college and university curriculum while fostering unity and a set of shared values so that individuals learn to live together in peace and harmony.

Denti (1999) has defined Multiculturalism as, "a process through which individuals are exposed to the diversity that exists in the society, the nations and the world." Multicultural education has emerged in the 1990s to address the issues as a result of multiculturalism in the societies world over. The aim of multicultural education is to offer all students the opportunity of becoming bilingual and bicultural, so that individuals not only have the chance to broaden their own knowledge of people and deepen their understanding of life, but also to provide the community as a whole with living bridges between the different cultural groups.

According to Banks (1997) Multicultural education is an idea, an educational reform movement, and a process. As an idea, multicultural education seeks to create equal educational opportunities for all students, including those from different racial, ethnic, and social-class groups. Multicultural education is a process because its goals are ideals that teachers and administrators should constantly strive to achieve. To implement multicultural education effectively should use content from diverse groups when teaching concepts and skills, help students to understand how knowledge in the various disciplines is constructed, help students to develop positive intergroup attitudes and behaviours, and modify their teaching strategies so that students from different racial, cultural, and social-class groups will experience equal educational opportunities. The total environment and culture of the school must also be transformed so that students from diverse ethnic and cultural groups will experience equal status in the culture and life of the school.

Diversity is becoming an increasing issue in our schools. It encompasses all ethnic and racial minority populations, religious groups, language differences, gender differences, economic conditions, and other distinctions. It becomes the responsibility of the teacher to manage all the diversities in the classroom. A successful learning environment includes equality and freedom of expression as well as the values of inquisition, fairness, and respect of students by the teacher and fellow students.

Gay (2002) states that teacher should know the learners' cultural values, traditions, communications, learning styles, etc. With this knowledge, the teacher is able to determine how to structure the classroom in order to adopt the most effective instructional strategy. Learning styles of students are often correlated with how assimilated they are into the dominant society. However, the teacher must provide a supportive and affirming environment for students so that they feel comfortable with their differences instead of getting frustrated.

The empathic disposition often manifests itself in teacher's caring relationships with students. Researches have noted that students, especially belonging to minority cultural groups who have caring relationships with their teachers, are more motivated and perform better academically than students who do not (McAllister and Irvine, 2002)

Hence, while teaching learners from diverse cultures in a classroom, a teacher ought:

- To form an informal relationship with the students rather than act like an authority figure. This leads to a stimulating classroom environment that makes learning enjoyable for all students. This can be done by displaying physical and verbal expressions of approval and warmth. A teacher's behaviour in the classroom is a key factor in helping all students reach their potential, regardless of sex, ethnicity, age, religion, language or exceptionality.
- To give importance to social environment also in the class rather than focus his/her attention only on instructional objectives.
- To present lessons clearly, with steps towards "solutions"

- clearly delineated
- To hold informal class discussions – it provides opportunities for students to see how concepts being learnt are related to students' personal experiences
- To emphasize global aspects of concepts so that the students can relate the curricular content with their interests and experiences
- To make an effort to know all of their students and to build on their strength and help them overcome their weaknesses.
- To provide a suggestion box in the classroom.

Multiculturalism and Substance Abuse

As one who is specially concerned about preventing substance abuse in youth, Benard (1991) emphasizes that youth who are biculturally competent, that is, able to function effectively in both their culture of origin and the dominant US culture, "have strikingly lower levels of substance abuse." Multicultural program in schools can therefore assist in preventing substance abuse among youth in the minority and the dominant culture. They can also have an impact on preventing or reducing school drop-outs, juvenile delinquency, adolescent pregnancy and teen suicide. If minority youth are effectively integrated and socialized with others in the dominant culture, there would be less marginalization and less of a need to engage in anti-social behaviour.

Multicultural education, as practiced in the world, takes many varied forms. With globalisation having its impact on economic, political, social, cultural, educational and environmental spheres, it is imperative for the educational planners to examine its potential effects so that a better understanding of the changing world order is made possible

IV. Teacher as Researcher

Action research enables the practitioners in the school education set up i.e. the teacher, principal, officers at the block and the district level to be professional. The

process involves mechanism to find solutions to the contextual problems of immediate nature. Action research assists practitioners and other stakeholders in identifying the needs, assessing the development processes, and evaluating the outcomes of the changes they define, design, and implement. If used appropriately, action research leads to the maximization of student achievement and brings out improvement in the education system. Teachers participating in action research become more critical and reflective about their own practice (Oja & Pine, 1989). Teachers engaged in action research attend more carefully to their methods, their perceptions and understandings; and their whole approach to the teaching process.

Minimal new skills are required for teachers and administrators to begin conducting action research. Action researcher can take advantage of the data already obtained as a part of the teaching-learning process. It equips every teacher with the necessary skills and with an attitude not to accept the status quo, but to ask, "Is there a better way of doing things?" A teacher or administrator trained in action research feels empowered because he or she is no longer merely the consumer of research which is produced somewhere else, but he/she can determine for himself/herself if the new widget is right or wrong for his situation. No matter how conclusive research findings are about a particular innovation, it may not be applicable in every context. Thus, the action research should be used with every new programme to determine if it is valid and if it is better than the previous practice in that particular situation.

Action research has been employed for various purposes: for school-based curriculum development, as a professional development strategy, in pre-service education, in systems planning, school restructuring and policy development. Action research can be used as an evaluative tool, which can assist in self-evaluation of teacher as well as institution. It is true that when action research is explained to teachers, they often respond "Oh, I am already doing that". And to some extent they are correct. Only the rigour and the systematic approach in carrying out the interventions may not be there. Further, the results are not documented so that there is not much sharing of experiences within the school or outside the school.

While the origin of the concept of action research can be traced back to the early work of John Dewey in the 1920s and Kurt Lewin in 1947 who used the term to describe the approach to solving social problems, it was Stephen Corey and others at the Teachers College of Columbia University who introduced the term action research in educational context in 1949. Stephen M. Corey (1953) defined action research as the process by which practitioners attempt to study their problems scientifically in order to guide and correct their decisions and actions is called action research.

Kemmis (1982) described action research as deliberate, solution-oriented investigation that is group or personally owned and conducted. It is characterized by spiraling cycles of problem identification, systematic data collection, reflection, analysis, data-driven action taken, and, finally, problem redefinition.

Main characteristics of action research

- Action research is a small-scale intervention.
- Action research is contextual in nature
- Action research is concerned with the real problems faced by the practitioner.
- Action research enables practitioners to engage in critical reflection on specific aspects of their curriculum and pedagogy and bring out desired changes therein.
- Through action research teachers get to know their students well, interact with them, observe them, and gather data.
- Quantitative and qualitative methods can be employed in conducting action research.

Steps in Conducting Action Research

Attempts have been made to explain the process of action research taking an example The different steps in action research are:

Step 1: Developing a focus

In action research you need not begin with a problem. Your research topic should reflect an issue of importance to you as a teacher. Suppose that you are a language teacher in grade 5 In spite of your best efforts, you notice that some of the

students make a lot of spelling mistakes in writing and speaking English. The first step – Developing a focus – here is that you are dissatisfied with the spelling errors and want to do something to improve this situation. Now, you select a title of the study:

- a) *Title of the Study: To improve students' ability to write and spell (orally) correct spelling in English*
- b) *Statement of the Problem. In this section you would like to state – the general situation in the class, with particular reference to the questions mentioned above*

Step 2: Analyzing the Problem

While analysing the problem, one should note down the possible causes underlying the problem. After analysing the causes, the teacher researcher should explicitly state what causes are under their control for which suitable strategy can be developed to improve the situation. Some of the causes may be

- a) *Students are not paying proper attention*
- b) *Teacher is not able to give sufficient time in the class*
- c) *Parents are illiterate and they are not able to help the children*
- d) *English spelling system is irrational*
- e) *Methods like rule to frame the words, words thought by break-up based on phonics do not ensure pupils learn to frame correct spelling*
- f) *Misconception among teachers that spelling can be taught, not caught*

Step 3. Formulating Hypotheses/Research Questions

Hypothesis/Research questions are based upon the objectives of the study. In the example, the main objective of the study is to enable the pupils to retrieve correct spelling from their visual memory to write and orally spell English words. The teacher makes the following hypothesis:

"If the pupils are taught spelling by adopting 'Visual memory technique' as the key to learning spelling, the spelling errors can be minimized "

Step 4: Developing Action Research Plan

While both **Validity** and **Reliability** are pertinent in Action Research than in other educational research forums, they should still be considered when you are

developing your data collection strategy. The researcher may ask himself the following question as you begin to develop a comprehensive plan for implementing your study:

- What do you want to do?
- What sort of interventions you are going to introduce?
- How will you measure the data?
- What baseline and post-intervention data will you collect?
- What instruments are necessary to gather the data?
- How often will you collect data?
- How will you know that it worked/didn't work?
- Have you spoken with your principal about this project?

In the example of spelling mistakes, the teacher plans his/her intervention in three stages

- 3) **Pre-test:** In this phase, the teacher identifies the students committing spelling errors and also spots the words where pupils have difficulty. This is known as the baseline data. Knowing how students performed before beginning of the study gives a starting point, which is used for comparing later results

- 4) **Intervention:** The action research design would involve the development of a suitable intervention programme, which may employ a pre-post experimental design, experimental/control group design, survey research and so forth. The researcher also needs to select an appropriate tool or technique of data collection. He or she may employ a questionnaire, an interview, an observation method, a case study method, and so on, for collecting the required information. In the present study, the teacher has decided to teach these students with 'Visual memory technique' in which the student visualizes the spelling and creates a mental image of the word accompanied by feeling of familiarity. First, teacher teaches the pupil to become aware of making and remembering visual images. Some games are initiated by the teacher like:

- Telling them to remember their room at home. What colour is the floor, the bed cover, the wall, etc?
- Asking them to remember things they have seen, e.g. Puppets, dolls, etc.
- Telling children to close their eyes and imagine a red square, a green circle on the right next to it, and blue triangle right next to that. Then ask questions - which is first, then second?
- After they have increased their visual imagery, teacher shows them how they can use their new, good memory in spelling.

- After they have increased their visual memory skill, teacher can show them how they can use their new, good memory in spelling.
- Teacher also gives proof reading exercises
- Spelling backwards for visual memory

Other steps involved are:

- *To look at the word*
- *Cover the spelling*
- *Write the spelling*
- *Check the spelling (If the spelling wrong get back to step one)*

The teacher may decide that she/he will give these exercises one hour for four days in a week for three months.

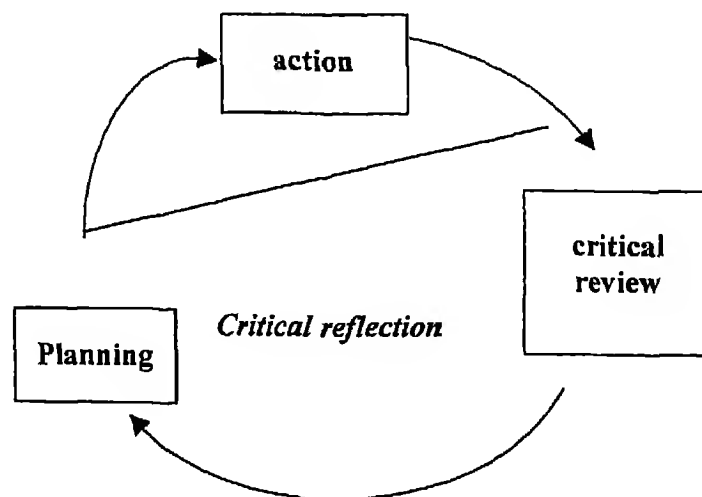
3) Post Test: The teacher may evaluate the improvement in spelling periodically and draw comparative improvements over a period of time. Post-testing is concerned with examining the impact of intervention, which can be conducted at periodic intervals as well as towards the end of the intervention. After the data is collected the next step is the analysis and interpretation of the data using appropriate methods involving statistical and other methods. You need to evaluate the impact of the action taken to enable him to draw conclusions and take decisions. For this you may require to compare the previous performance of the students with their current performance. In order to make it easily understood by others, you may use some simple statistical procedure and present the information using tables, charts, graphs etc.

Baseline data (or Pretest) in the example of spelling errors is the students who are making errors and the words where students are having problems. Post testing is concerned with examining the impact of intervention, which can be conducted at periodic intervals as well as towards the end of the intervention. In the case of example of spelling errors, you can show the periodic improvements in performance by *preparing graphs*

Step 5. Personal Reflection on the Action Research Process

Action research is a cyclic process and thus critical reflection brings about refinement and improvement in the results with each cycle. It alternates between action and critical reflection as it moves forward. The reflection begins with critical review of the situation and of past actions. It is followed by informed planning of the next action. There are cycles within cycles. In each cycle there is action and critical reflection. During reflection people first examine what happened previously – they “review” They then decide what to do next – they “plan”. So action is followed by critical reflection. What worked? What didn’t? What have we learned? How can we improve by doing it differently next time?

Reflection is followed by another action. The understanding achieved, the conclusions drawn, the plans developed are tested in action. Critical reflection in each cycle provides many chances to correct errors. A cyclic process can be flexible and responsive. You don’t have to design the research in detail before you start. Instead, you can refine your research design as you learn more about the situation you are researching. The design gets better, fits the situation better, as you proceed. A cyclic process gives more chances to learn from experiences.



Action research is a process well suited to situations where researcher wishes to achieve change (the “action”) and understanding (the “research”) at the same time. With regular, critical and systematic reflection he can have more confidence in his research conclusions. Without it he may overlook some important evidence.

V. Use of ICT in Teaching Learning Process

The developments in the field of Information and Communication Technology (ICT) have brought about paradigm shift in the methods of transaction or delivery of the content in the classroom processes. This requires proper technological skills and right attitude on the part of the teacher. The learners cannot derive optimal benefits from the Computer Based or Mediated Learning Resources if the teachers themselves are not trained properly and are not sufficiently motivated. Effective use of technological aids and approaches encourages movement from teacher centred to learner centred approach allowing students greater autonomy and scope for exploration and creativity towards attainment of larger developmental goals. The technology-rich learning environment is characterised by collaborative and investigative approaches helping in integration of content across the curricula promoting conceptual understanding. The teacher and students become co-learners in the cooperative learning environments to benefit from the ICT classroom situation. Several studies have shown that the Computer Aided Instruction (CAI) is more effective for individualized interactive instruction as it helps to improve knowledge, understanding and application level capabilities of the pupils. The most important and challenging role of the teacher is the selection of the media or medium that he/she would like to use in the classroom. Teachers are often not able to decide by themselves on the selection of the media/medium. At the outset, this decision is highly dependent upon a thorough knowledge of: (i) what is being taught; (ii) how it is to be taught; (iii) how it can be tested; and (iv) who are the learners? Research findings suggest a variety of teaching media, which are available, not only motivate the learners, but also make the process of teaching easier and more effective. These include both print and non-print media.

The delivery of education via online courses is set to change the entire landscape of course development and control mechanism on delivery of Instructions. Thus, the role of teachers will evolve into one that combines the skills of a social worker, guidance and camp counsellor, and a facilitator providing one-on-one mentoring. Several studies have indicated that the Computer Aided Instruction (CAI) is more effective for individualised interactive instruction as it helps to improve knowledge, understanding and application level capabilities of the pupils. Effective use of technological aids and approaches encourage movement from teacher centred to learner centred approach allowing students greater autonomy and exploration and creativity towards attainment of larger developmental goals. The technology-rich learning environment is characterised by collaborative and investigative approaches helping in integration of content across the curricula promoting conceptual understanding

To suitably harness ICT resources, the teachers will have to be trained suitably to cope with the change. Further, the appropriate use of modern technology in school curriculum would reduce the workload of teachers. There must be a balance between using technologies and traditional methods of teaching learning

VI. Summing up

The paper presents various issues and concerns in education like globalisation, technological advancement including ICT, multiculturalism, decentralization of education and their impact on education systems. It also enumerates and discusses the role of teacher mainly with regard to curriculum designing, curriculum transaction, tackling the culture-specific issues, as manager of learning resources, including use of ICT in class-room, as a researcher and as social change agent.

The preceding discussions clearly establish the significance of the participation of teacher in the process of curriculum design. Also, the curriculum, once designed, is implemented by the teachers and they may adopt different strategies for its implementation depending upon the classroom reality. The involvement of teachers in

the design of curriculum develops a sense of ownership among them. As a result, they take all steps to ensure its successful implementation. You have known that action research is a technique, which empowers the teachers to solve their problems in day-to-day classroom or work situations, and thus makes them professionally competent. In this method, the teacher is engaged in a self-reflective inquiry to know what is wrong and what can be done to improve the situation. It is also context-specific; the strategy which may prove effective in one situation but may or may not be effective in other situations. The cyclic process, which involves planning, taking actions and reflecting upon the results of the actions. If the results are not satisfactory, then the teacher again indulges in reflection trying to find out what went wrong and re-planning the next action. Critical reflection in each cycle provides many chances to correct errors. In action research desired change is achieved through suitable interventions and at the same time researcher is benefited by better understanding of the situation and improved knowledge. Action research can be conducted by an individual teacher, a group of teachers, and in collaboration with universities or teacher-training institutes. Action research helps in the professional growth of the teacher. The developments in the field of Information and Communication Technology has brought about a paradigm shift in the methods of transaction or delivery of the instructions in the classroom. Effective use of technological aids and approaches encourages movement from teacher centered to learner-centered approach allowing students greater autonomy and scope for exploration and creativity towards attainment of larger developmental goals. The technology-rich learning environment is characterized by collaborative and investigative approaches helping in integration of content across the curricula promoting conceptual understanding. The teacher and students become co-learners in the cooperative learning environments to benefit from the ICT classroom situation. Multicultural education acknowledges that schools are essentially laying the foundation for the transformation of society and the elimination of oppression and injustice.

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In-service Education and Training of Teachers: Issues, Strategies and Perspectives

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Introduction

While many factors influence educational output, research evidence suggests that students achievement critically depends upon the quality, commitment and expertise of classroom teachers. (Burke. 1996, Levin and Lockheed 1993). Teachers hold the key to educational change and effective school improvement (Lewin 1993). In this context in- service teacher education has great significance. Teachers professional growth is a synergistic outcome of multiple inputs; that is quality of pre-service programmes offered to teachers as initial teacher education, in-service programmes undertaken by teachers from time to time, practical experience gained by them in schools and finally teachers own self directed life long learning initiatives.

World Declaration on Education for All (WCEFA 1990), Delhi Declaration (1993) and World Bank (1995) has stressed the need of teacher development as it has direct implication for Education for all. Components like pre-service programme, induction programme, in-service courses and teachers self learning jointly and in tendum rejuvenate teacher development resulting into preparation of an 'informed teacher who will provide improved pedagogy' and contributes to shaping of reflective teaching (Schon, 1987).

It is no cliché but a reality that those who teach should never cease to learn. The National Policy on Education, (1986, p-26) stipulated that "teacher education is a continuous process and its pre service and in-service components are inseparable." UNESCO (1996 p 147) stresses the importance of in-service education and observes "in-service training is on the whole as effective as pre-service training, if not more so in its effect on quality". In-service teacher development programmes are now designed to undertake delicate task of building in teachers values such as love and

understanding, sensitivity and respect for students. Ravindranath Tagore (1962) has said, “ a lamp can light another lamp only when it continues to burn its own flame.”

The focus of in-service education normally is on following dimensions: -

- Gaining deeper understanding of new curricular concerns and content areas, which could be acquired through orientation programmes.
- Updating teachers' subject competence and widening their horizons of knowledge This could be achieved through refresher courses
- Developing competencies and skills in new areas This could be done through training programmes both of short and long durations.
- Preparing teachers for new roles for example in-service programmes should be organized when a teacher becomes principal or when a principal becomes district education officer or when a principal becomes an researcher in SCERTs

Historical Developments

The need for in-service education in India was visualized as back as 1949 when the University Education Commission observed that a teacher to keep alive and fresh should become a learner from time to time However, the first structural arrangement to launch in-service teacher education at the school level was made between 1955-58 by establishing 74 Extension Service Centres and 23 Extension Units attached to graduate training colleges in India. Historically, it was the first step to promote in-service teacher education With extension Centres set up, INSET got institutionalized.

The second step, massive and momentous, was taken in 1961 by establishing NCERT and its four Regional Colleges of Education (now known as Regional Institutes of Education) to launch programmes of in-service and pre-service nature. The National Institute of Education of the NCERT was the premier department to launch training and research programmes for in-service training. Later on in Seventies the structure of the NCERT was replicated with modification at the State Level State Institute of Education & State Institute of Science Education were setup. Later on

these institutions were upgraded to become State Council of Educational Research & Training. Now they are apex training and resource institutions at the State Level. After about ten years in 1986 District Institutes of Educational Training were setup as training and resource units at the district level. At present there are nearly 450 DIETs in the country.

The third milestone was realized in 1973 when, under a Tripartite Agreement between Government of India, UNESCO and UNDP the Centre of Educational Technology was established to use mass media to support and enrich primary education and teacher education. The institution (CET) under the well-known SITE project trained 45,000 primary school teachers in six States using multi-media. The CET in 1983 evolved into the Central Institute of Educational Technology (CIET). Beside CIET there are now seven States Institutes of Educational Technology (SIET). These institutes develop programmes for elementary teachers which are telecast through Satellite TV. With this step began the systematic use of mass media and educational technology in in-service teacher education at the national and state level.

The fourth milestone was reached when the Government of India established Indira Gandhi National Open University (IGNOU) in 1985 to launch various programmes including in-service teacher education programmes through open distance mode. The IGNOU has now launched in-service training programme for teachers at higher education level through open distance education mode. It has plans also to undertake staff development programmes of teachers at primary school level.

NCTE was established in NCERT in 1973 as a non-statutory body to advise the Ministry of Education on all matters relating to Teacher Education. In 1993 Government of India, by an Act of Parliament, established the National Council for Teacher Education as a statutory body with a mandate to undertake planned and coordinated development of teacher education at all levels. A detailed discussion on all important milestones in teacher education can be seen in Dewal (2003).

To improve in-service training programmes National Commission on Teachers (1993) has suggested need assessment, choice of right resource persons, change in

methodology, use of educational technology, preparation of software as some of the steps to revamp INSET. This paper brings to light three aspects; issues, strategies and perspectives relating to INSET and also discusses aspects training methodologies relevant to INSET.



Objectives

This module has been prepared to achieve the following objectives.

- To orient participants to major issues in teachers education
- To discuss various strategies and highlight their strengths and weakness
- To identify special features of training methodologies following context input process and product (CIPP) modal
- To present future perspective on INSET in the light of emerging trends of globalizations multiculturalism and informational technologies.

INSET is an important component of teacher development. It has inseparable bonds with pre-service education as well as field realities. Each teacher should undergo and attend some in-service education programmes after every four or five years. Looking to the massive number of school teachers in India (nearly 5 million teachers) and the limited availability of facilities and resources, the INSET system needs drastic review. Some of the key questions are:

- Can INSET programmes evolve out of pre-service programmes and then be accredited so that pre- and in-service training programmes become inseparable?
- Can all pre-service institutions be made bimodal institutions i.e., delivering both pre-and in-service courses? (in the Indian context, it has been done partly)
- Can all INSET programmes build distance and telecommunication technologies in their delivery mode and offer online courses?

- In the United Kingdom, local education authorities do not offer in-service teacher education programme. They support schools to launch school-based INSET and provide funds for grant related to in-service training Schemes. Can this system be adopted in India? Can something similarly be started in one or two districts on a pilot basis?
- Is it possible to set up an open learning teacher center in each district?
- How can the isolation of teacher training institutions be removed? And how can teacher training institutions come closer to universities on the one hand and schools on the other?

Let us elaborate three critical issues relating to

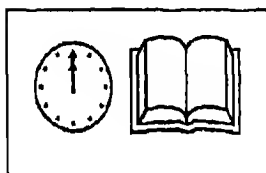
- For whom INSET be offered, that is who should be clientele of INSET programmes?
- What should be the locale of INSET programmes?
- What type of content needs to be covered?

Target Group: The main target group of In-service programmes in India has always largely been teachers. Gradually, the canvas is widening to include other functionaries like headmasters, principals and other supervisory staff. This net now includes categories of personnel working as para educational functionaries like hostel warden, school counselors etc and members of local bodies. Further, in-service teacher education programmes now cater to teachers working in formal schools, nonformal centers, open and distance teaching institutions and institutions of physical education, adult education, and special education.

Locale: Locale of INSET has been largely off site i.e. in the training or resource institutions. Institution based trainings has its own strengths in terms of availability of resources. The limitation is this arrangement dislodges participants from their work place. Now there is a trend towards school based INSET programmes. Many institutions want that training programmes be organized at the school itself so that participants do not get dislodged from their work place. On-site programmes take training to the doorsteps of schools. Gardner (1994) makes a distinction between in-service and on service programmes, and regards in-service programmes wholly as non-school based and on service training as wholly school based.

Content: The contents of the in-service programmes differ from programme to programme. However, national orientation programmes do contain some common themes such as strategy to promote girls education, pedagogy relating to multi grade teaching, essential levels of learning at the primary level, emerging roles of primary school teachers, and comprehensive and continuous evaluation. Other themes on which programmes are organized relate to subjects such as teaching of language, teaching of mathematics, teaching of science and social sciences, teaching, and health education and work experiences.

There are still others important issues relating to whether INSET programmes to optional or compulsory, whether they should be credit oriented and who should finance these programmes. Some educationalists feel that all INSET programmes should be optional, they should be credit oriented and appropriate fee should be charged from those who undertake and join those programmes



ACTIVITY 1

- ❖ What are the major issues in your country with respect to INSET?
List any four issues in order of your preference
- ❖ What is your personal view about charging fee from INSET participants?

INSET Methodology

In-service participants are different from pre-service students. Trainees in in-service programmes come with field experiences whereas the latter do not have field experience. The pre-service students are the captive audience whereas in-service participants are on the job independent, self directed, autonomous learners. Training strategies should take in account these aspects as well as the previous knowledge of trainees. The organizers and the resource persons can make an in-service teacher education programme more effective and interesting if the age, experience and

background of the participants are appropriately used at the planning phase. Since in-service participants bring a lot of experience and new way of looking at educational events, they can significantly contribute to the design and development of the programmes.

INSET should develop a learning culture both in participants and resource persons. The former should be critical inquisitive, curious to know more, and willing to work for longer hours. The resource persons, on the other hand, should be more innovative, more responsive to trainee's needs. They should realize that in an educational encounter both the teachers and the learner are partners in the game. They are essentially co-learners.

Education has a delicate task of character-building of students and therefore INSET should be conducted to train teachers in developing affection, love, understanding, care, sensitivity, and respect for students and their differences. A teacher must develop within himself or herself the capacity to innovate. This aspect of developing skills and attitude for lifelong learning need be reinforced through INSET. In-service programmes should also try to develop what Fritz (1989) calls creative tensions. One of the key occupations of in-service programme should be to make teachers reflective learners and to sensitize them towards what Eisner (1991) calls "deeper mission of schooling," promoting curiosity, growth of imagination, and refinement of sensibilities. INSET must develop a symbiotic relationship between action research and classroom practices. And above all, INSET must develop teachers as co-learners. "The capacity to learn is the capacity to alter what one is and has been. It places the present at risk" (Scheffler, 1985, p.122)

INSET programmes will have to keep in view competencies and commitment of trainers. The theme of the training and the environment of the training institution play a significant role. The effect of INSET programmes do not depend upon a single factor but on the interconnectedness of multiple factors like the quality of stimulus provided to the trainees, the training environment, the knowledge and beliefs of trainees, and their professional commitment. Further, the changes has to come not only in the domain of the teacher's knowledge and beliefs and attitudes, but as well in

his or her practices that he or she is expected undertake in the school situation. Other important areas for INSET are to develop life skills, positive attitude towards culture of peace, and sustainable development (Gregorio, 1996). Life skills can be viewed in different ways. One way is to see life skills as skills in communication, cooperation, and creativity. Other way is to see life skills as anticipation, exploration, participation, and extrapolation (Peiris, 1996, p. 314-315). In most of the INSET programmes, these new thrust areas are a rarity. Fortunately, planners of INSET in India are gaining a growing awareness that unless teachers are trained to become action researchers, co-learners, and partners in curriculum design, mere development of pedagogical skills will not serve the purpose.

Transactional Strategies

Generally speaking there are three transactional strategies, used, in in-service training programmes, face-to-face cascade and open distance education strategy. One has to judiciously select an appropriate training strategy keeping in view the theme, programme duration, background of participants, and availability of resource persons, and technologies to be used. Instructional methods may range from lecture-cum-discussion to project work, library work, group interaction and field visits. In-service education and training programmes also undertake case study method, brain storming sessions, panel discussions, seminars, symposia, and small group techniques. Study visits, and attachments are also a form of in-service programmes.

Face to face Strategy: It offers in-service training programmes at its premises using direct, face-to-face, training approach. It is most effective when the number of participants is around 30 to 40. Besides lecture – cum – discussion mode, many other transactional strategies can be used, namely project method, case method, library work, peer learning sessions, buzz sessions and other small group techniques. The merit of this approach is that there is a direct and sustained interaction between the participants and the resource persons. The limitation of this approach is that it cannot be used when the institution wants to train a very large number of participants within a

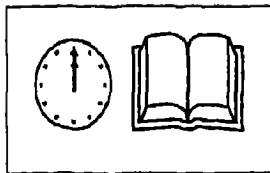
short time. Most of the training institution, largely, use this model. There is a general feeling that this approach should be increasingly supplemented by media-based model.

Cascade Strategy: The number of persons to be trained in this model is very large and the training design is built on two or three tier systems. In the first lap, the key resource persons are trained who in turn train resource persons who, again in turn, train teachers. The advantage of this model is that a large number of teachers can be trained within a short duration of time. However, it has its limitations. Knowledge and information passed on at the first tier of key resource persons and then at the second tier of resource persons get diluted, resulting in transmission loss of training effectiveness. One way to overcome transactional loss is to prepare video cassettes of the first tier programme and liberally use them during subsequent programmes.

Media Based Open Distance Education Strategy: With the advent of satellite technology and computers many INSET programmes are imparted using electronic media. Audio - conferencing and tele-conferencing are being used, where electronic media play a key role and the print material undertakes a supportive role. The advantage of this model is that the training objectives can be achieved within a limited time period and trainees do not get dislodged from their place of work. The constraint of this approach, however, is the limited availability of the technology itself and its high initial investment.

Mix Mode Approach

The above three strategies in India are now not seen as “either or” proposition. Depending upon the characteristics of the programme, appropriate mix may be used. It needs to be mentioned here that cascade mode which was used previously has now been greatly modified. It includes a significant chunk of media based programmes. Similarly face to face mode also includes distance mode and a part of the programme is transacted at the work site itself.



ACTIVITY 2

- Which transactional strategies are most commonly used in your country?
- What other strategies you can think of besides the one discussed above Write briefly?

Context- Input Process Product (CIPP) Modal

CIPP Modal has been used in the context of evaluation. However the same can be used for INSET. Any programme organized under INSET has an overall context, provides essential inputs, processes and implements the programmes with a view to achieve required outputs. Context of any INSET programmes relates to objectives, their relevance and based on trainers expectations, and trainee's needs.

Inputs includes factors like where the programme is giving organized (locale), who are the trainees, what are their initial behaviours (or competencies), who are the resource persons, what are their expertise and specialization. What media and support material is available to transact the programme, what is the duration and time of the programme and what type of management system is available for the programme.

Process aspects relate to how interactivities have been planned; (interactivity with resource persons, with fellow participant with study material) What projects and self learning processes have been planned? What mechanism exists for monitoring and feedback. It is essential that monitoring be done and feedback be provided on day to day basis. It will help in improving the programme to deliver the expected outcomes. Any delay in monitoring the processes and providing feedback to the system leads to systems malfunctioning. The CIPP model has been graphically presented in Fig 1.

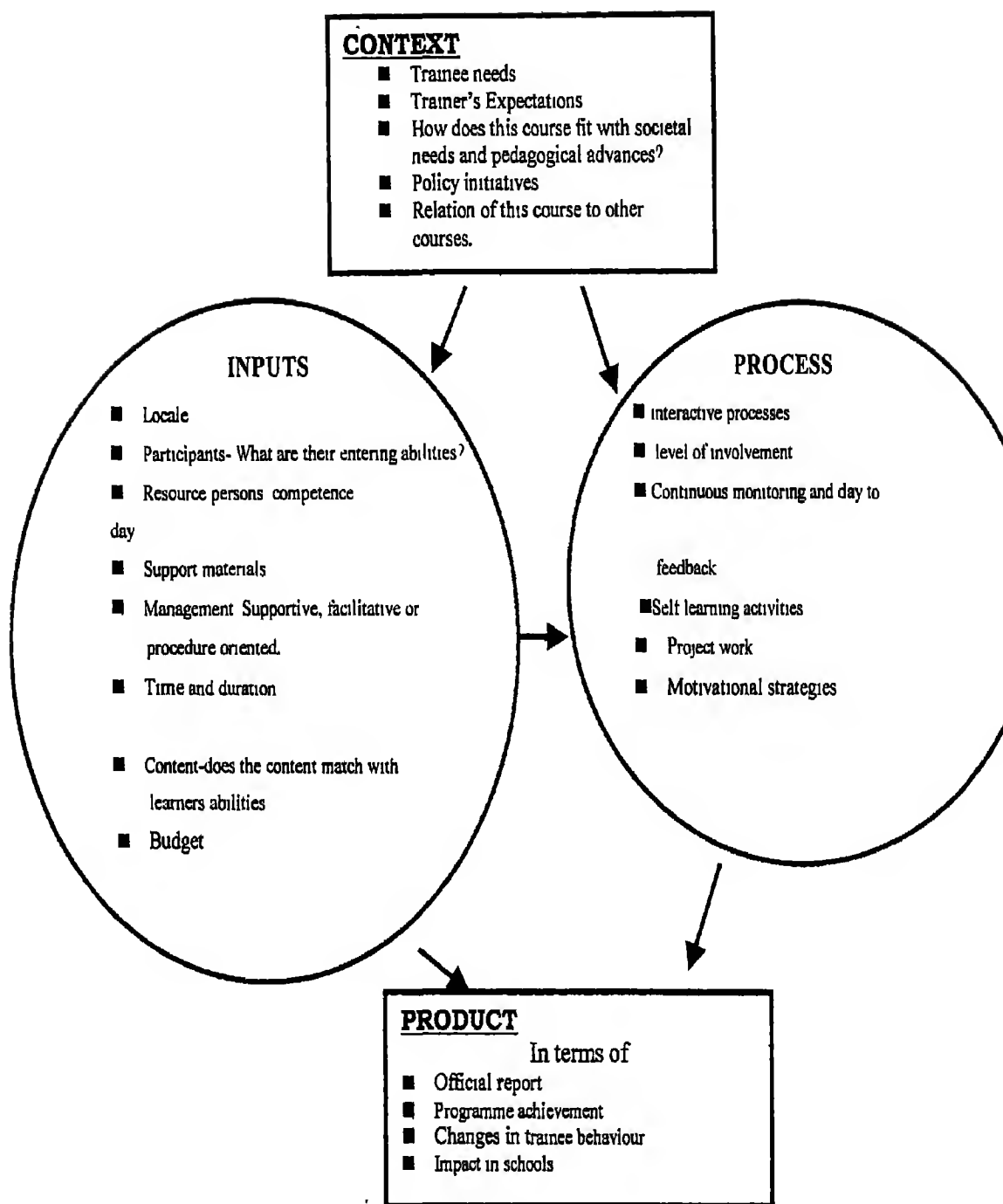
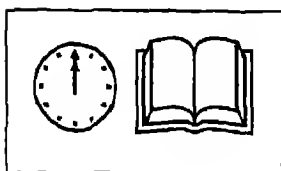


Figure 1

Outcome of INSET generally comes to us in the form of programme report which makes critical observations on the programme itself; to what extent it has achieved its objectives. But the story should not end there. It should see to what

external it has helped the trainees to update their knowledge and change their attitudes and perceptions. Still further it should see its impact in school situation. If there is an INSET programme on how to teach mathematics using project and activity methods it should evaluate to what extent teachers undergoing the programme actually use the method in school situation. In our view training managers in charge of INSET programmes may like to consider in depth this CIPP model as above and use it with suitable modification to suit local conditions.



ACTIVITY 3

Give your views with explanation on the model presented in fig 1

- Excellent
- Very good
- Good
- Needs modifications
- Useless

Perspectives

In-service education needs reengineering. Reengineering has been described as fundamental “rethink and radical redesign of business process” for “dramatic achievement in critical contemporary measures of performance such as cost, quality service and speed” (Hammer & Champy, 1993, p.32), one would like to see aspects of reengineering used in in-service teacher education. One aspect of reengineering could be the making of pre-and in-service teacher education an inseparable whole. In India they still operate in two separate worlds. This idea has been emphasized by Torres Rosa Maria (1996 p.33) that teacher education should move from rhetoric to action and undertake paradigmatic change by building “unified teacher education and training system which views pre-service and in-service learning as a continuum”. An efficient teacher in the opinion of the World Bank (1995, p.7) is one with good knowledge of each subject and a wide repertoire of teaching skills. This means that

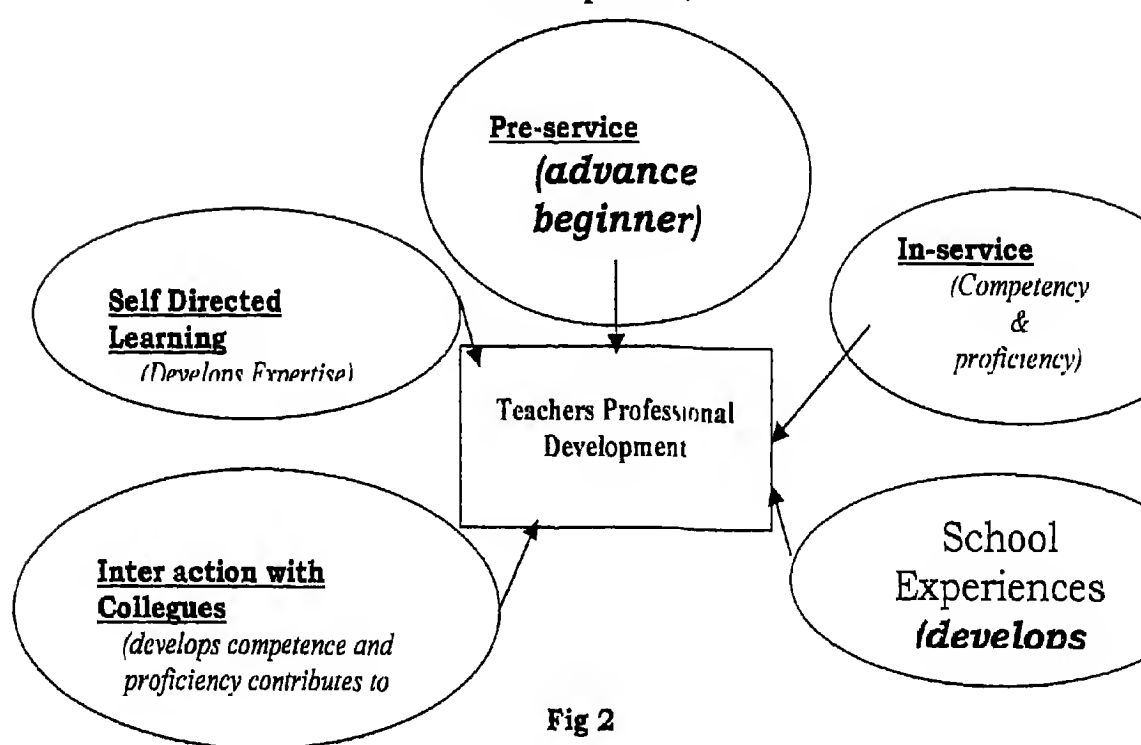
emphasis on pedagogy be supplemented by strengthening content (subject matter) competency. Those institutions which have faith in this ideology offers orientation courses for pedagogy and refresher courses for content enrichment. This needs establishing links with university departments so that teachers' advances in subject areas could be achieved

In Indian setting, out of nearly 20,000 teacher education institutions these are about 700 which often both pre-service as well as in-service courses. The remaining are uni-modal in function – they offer only pre-service courses. The general view is all should be bi-modal in nature; offering both pre and in-service courses.

From delivery point of view courses offered by IGNOU and NCERT have open distance learning components. All other teacher education courses are through face to face mode. It is felt that in future, almost all courses should have some component of open distance delivery. It is also felt that all INSET courses should be made credit oriented. That is on the successful completion of an INSET programme, the participants should be given some credits and ones he/she accumulates a stipulated number of credits he should be awarded certificate or diploma or degree as the case be. This arrangement would provide non-monitory incentives and may help in career mobility. It is true that all future classrooms would have students from different cultures. Thus as advocated by Zeichner (1993) all teachers must be educated for cultural diversity.

In the beginning of this paper, it has been observe that teacher development is complex ongoing task which comes through institutional and self efforts. Professional development has been seen as five stage venture (Berliner 1995) that begins with novice to advance beginner to competence level to proficiency to expertise level. It is achieved through pre-service in-service, school experiences, peer interaction and self directed learning. Fig 2 presents this aspect graphically. Synergistic impact of various professional activities result in developing the mindset of a reflective teacher (Villar, 1995)

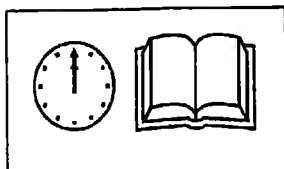
Composite View of Professional Inputs For Teacher Development .



CONCLUSION

The role of INSET has never been more obvious than today. In the present setting of growing globalization, and fast telecommunications, teachers have an obligation to shape minds and character of the new generation so that they can live happily with globalization by developing a catholicity of outlook and by asserting localization and individualization. INSET with its wider connotation of study leave, teacher exchanges, attachments, sabbatical leave, school-based extension programmes should equip teachers to bridge tension between globalization and localization. Teachers need to develop knowledge, skills and attitudes to help students to keep to their roots and also make them sensitive and responsive to international events. Multiculturation and plurality of world cultures are important agenda for the world peace. Appreciation of differences and skills to live together can come only when teachers realize that clash of civilizations can be averted only by persuasion, patience, dialogue and discussion. The messages of Indian tradition **Adhesta Sarva**

Bhootanama is the key to solve world problems and teachers have the duty to propagate this message. INSET programmes cannot overlook this orientation.



Module end Questions

- 1 What is the state of art of INSET in your country?
- 2 Do you have INSET programme on value education?
- 3 Should there be specific INSET programmes on teaching multi-cultural classes?

GLOSSARY

Metacognitive System

This system regulates all types of thought systems including learning logistics. It has various functions like. goal specification, process monitoring, clarity and accuracy monitoring, and learning logistics. In goal specification, students need to be explicitly taught how to set goals and to muster motivation to complete the task. This second component is process monitoring which checks how one learns (by whole part method or parts whole method) and what tactics, or processes one uses to carry out the tasks. Other components of the metacognitive system are monitoring for clarity and accuracy. The last relates to learning logistics i.e. what place and what time is most appropriate for learning.

Contextualizing

It may mean two things, one to connect the issue (learning task) with its broader context, second to connect information with the context to which students are familiar. This method of teaching is especially important to teach students who are from other cultures.

Cooperative Learning

Cooperative learning is a teaching strategy that enables students to work collaboratively together in structured heterogeneous groups toward a common goal.

while being held individually accountable. Its main features are, it has structure, has a teaching strategy, provides opportunities for students to practice the LEARNING together, holds students accountable as individuals, uses group structures that reflect the class.

Nonlinguistic Organizer

Nonlinguistic organizers are graphic (pictorial) models that allow the organization of concepts into a framework. Some examples of these organizers are: concepts maps, flow charts, timelines, tree charts etc

Education

Education is a process of human enlightenment and empowerment for the achievement of a better and higher quality of life.

Pre-service Education

Pre-service teacher education is a process of transformation of the untrained entrants possessing requisite background into competent and committed professional educators.

In-service Education

In-service teacher education refers to a recurrent, organized and need-based continuing education of teachers already on the job to update and enrich their professional competencies, strengthen their commitment, and enhance their professional performance in the classroom as well as in the school and the community

Competency

Competency includes knowledge and skills essential to execute a task. It shows ability to do a task. NCERT has identified ten areas of competency. They are contextual, conceptual, content, transactional, related to other education activities, to develop teaching-learning material, evaluation, management, related to working with parents, related working with community and other agencies

Reflective Teaching

It refers to process of critical analysis where by teachers develop logical reasoning skills, thoughtful judgment and attitudes supportive to reflection. (Villar 1995 p.178)

Commitment

Commitment means willingness to do the task. It means a resolve to execute a given task. With regard to teachers areas of commitment are commitment to the learner, society, profession and excellence.

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Pedagogy of Value Oriented Education

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Pedagogy of Value Oriented Education

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Introduction

All educational endeavours are value driven. It is difficult to conceive 'value less' or 'value neutral' education. Around development of personality, enhancement of quality of life, inculcation of values, preservation of culture, character development are important objectives of any education system. In order to realise these aims, curriculum, instructional materials and methods of teaching-learning are designed and transacted. Thus, the aim of education, curriculum, instructional materials and methods are all value laden.

Needs of value Education

The erosion of values in practically every aspect of human life is a matter of universal anxiety and concern. The roots of such value erosion could be traced from multiple contexts. The pattern of social change, modernisation and development that had taken place under the impact of scientific and technological development brought in its wake a general decline in values in public life. Globalisation, liberalisation and privatisation have led to the emergence of the market economy resulting in cut-throat competition, consumerism, materialistic attitude to life and sharp decline of values. These have been manifested in the forms of low level of tolerance, violence, disruptions in the family life, corruption, atrocities on women and children, terrorism, social tension and social discriminations. The Report of the Delor's Committee of UNESCO (1996) has highlighted the critical role of education in personal and social development and focussed the need to inculcate human values. The UNESCO Conference held in Australia during 1998 around four pillars of learning propounded by Delor's Commission highlighted the need of 'learning to live together' in the context of social cohesion in a multicultural society.

In the modern world order 'interdependence' and 'complementarity' have become central features of human relations. During war, floods, earthquake, violence and similar type of life threatening situations people of the entire world become concerned. The whole world takes the shape of one family and common concern is expressed for survival of life in planet earth. '*Vasudhaiva Kutumbakam*' (The whole world is my family) is not a mere slogan, people are now genuinely concerned with the common future of mankind.

The developing countries of Asia and Africa including India pursued the western models of development which were largely 'technological', 'material' and 'economic' in nature. It has now been realised that economic development alone cannot lead to sustainable human development. Negligence of ethical and moral aspects of life in societies the world over has caused severe imbalances in development. The situation has become deplorable and explosive due to inequity in sharing of resources, poverty, over population and other disadvantages such as ill-health, inability of access to education and information, crime, violence and degradation of physical environment. There is an urgent necessity to bridge the gap between technical/material culture and value culture. Urgent need has been felt to design value education interventions to deal with the situation. United Nations Research Institute for Social Development (1997) and UNESCO have pleaded for inclusion of indicators of individual and social wellbeing and the ability of people to 'live together in a multicultural society'. World Bank has developed the concept of 'Social Capital' indicators'. A number of NGO's, Foundations and Research Groups have initiated projects on formulation of development indicators based on value oriented, people oriented and community oriented development indicators. Bah'ai International Community (1998) has pleaded for valuing spirituality in development based on five principle such as unity in diversity, equity and justice, equality of sexes, trustworthiness and moral leadership and independent investigation of truth.

Exploitation of large numbers of children belonging to age group 6-14 years in the form of hazardous child labour and child abuse due to poverty is a big challenge to universalisation of education in developing societies. A large number of children

suffer from disadvantages associated with first generation learning, frequent absenteeism, lack of concentration/confidence due socio-economic background, poverty and malnutrition. Convention on the Rights of the Child adopted in U.N. General Assembly on Nov 20,1989 has reiterated the need for value based approaches to education. Health, nutrition, promotion of small family norm, environmental protection, measures to control the problems of air, water and environmental degradation, intelligent use of technology and sustainable model of development have emerged as important areas of intervention for improvement of quality of life the people. Continuous pressure is building up on the school system to respond to such problems through value education initiatives.

The need for value education has been deeply felt in the broader context of commercialisation of education which has led to the creation of a distressing divide between 'schooling' and 'education'. Education is a value and school is a deliberate instrument to realise it. But what is valued today is efficiency with which the school prepares the child to compete for success in a market economy. The value frame provided by home, community, school, peer group, media and society are different and often contradictory. Values propagated by the electronic media and peer group on many occasions are more powerful than values taught in the school or by the parents. Violence projected in the films, TV programmes, and video has severe impact on school children. Watching TV for a longer duration is responsible for diminished psycho-motor, affective and social skills of children. In Afro-Asian societies the values were transmitted by parents, teachers and communities traditionally. Recently the influence of the parents and society on the children have declined considerably due to social change and many other factors. Consequently, the role of teachers and teacher educators in value inculcation has increased considerably. The menace of private tuition is another issue the root cause of which needs to be analysed. Education like other consumer goods is marketed by the profit motive. Market forces today regulate the production, distribution and growth of knowledge. The genuine objectives of education like development of personality, moral character, creative self-expression, democratic citizenship, nurturing of talent have suffered serious neglect in schooling. 'Schooling' has thus gradually distanced itself from its central purpose of

education. The schools and teacher training institutions are not in a position to practice what they preach. Therefore, the need for value education initiatives in schooling and practices of teacher training institutions have been strongly felt by many.

In this module an effort has been made to help the teacher educators to reflect on major concepts and ideas related to value education such as definition, types of values, salient features of the pedagogy of value education; methods, strategies and activities; suggested value education programmes in schools, evaluation, teacher training initiatives etc

The module has been developed to realise the following objectives:

- To reflect on definitions, concepts and major ideas related to value education, such as definition, types of values, salient features of the Pedagogy of value education, methods, strategies and activities of value education, value education programme in schools, evaluations teacher training initiatives etc
- To choose personal, social, moral and spiritual values
- To develop self-vision
- To integrate value education theme to teacher training programmes
- To explore skills to create a value based atmosphere in the schools
- To participate in the process of active value learning
- To work in group to experience the value activities of the children
- To network with other teacher educators, parents and NGO, committed to implement value education programme in the Schools.

Concepts and Major Ideas

In spite of recommendations of various Commissions, Committees and Policy Directives, value education could not get adequate curricular recognition and importance due to prolonged debate and confusion over a number of conceptual and pedagogic issues. Of late, value education has emerged as the central intervention in school education. Some of the critical conceptual questions are:

- How to define values?

- Are values relative?
- What type of values the school should transmit?
- What are the salient features of the pedagogy of value education?
- What are important approaches of value education?
- What are the steps involved in the process of inculcating values?
- What type of materials are available for value education?
- What are the methods, strategies and activities for exploration of values?
- What type of value education programmes could be organised in the schools?
- What are the pre-service and in-service teacher education implications?
- How values could be evaluated?

Let us elaborate the critical conceptual and pedagogic issues and consensus viewpoints.

Definition

Different terms like 'value education' 'value oriented education' 'education in human values', 'moral education' and 'spiritual education' are used to denote the concern. The term 'Values' may have multiple meanings. It may mean quality of being useful or desirability. For example, a particular book has great little/some/no value to a researcher. The nuclear scientists have developed nuclear power. Now, in which direction the nuclear power should be used – whether for generation of nuclear energy or for manufacturing of atomic weapon is a question of value. It may also mean the worth of a commodity or an asset or the value of Indian currency in relation to dollar. For example, the value of property may or may not increase in near future. It may also mean preferences/choices of an individual. The researcher may be interested to investigate the value preferences or choices of adolescents. Values may mean belief upon which an individual may act by giving choices/preferences/liking or disliking. Values could be defined as standard for judging attributes like good or bad, right or wrong, praise or blame. Values could be a set of rules for rating behaviour.

Values could be related to material objects or abstract qualities and ideals. Values are standards for rational judgement. Thus, 'value education' could be defined as prescription for an individual child about what is good – what is bad, what a child should do and what a child should not etc. Value literacy empowers a child to critically analyse and explore what is good for him or what is bad for him. Values are most desirable ideas sought to be imbibed. Truth, Beauty and goodness are considered as supreme values of our life. The word 'Value' has intrinsic worth and positive orientation. The values are considered as the highest ideal sought to be inculcated in individuals and groups. The qualities considered as esteemed, prized and approved by individual/society are considered as valuable. An interrelated socially accepted set of values which improves the quality of human life could be termed as '*Value System*'

Relativity of Values

Values arise from personal preferences, desires and needs. What is good for one person may not be good for another person. But individual cannot live in isolation. Society, of which individual is a part, sets the norms and standards of conduct or action which are termed as good or bad. The goodness or the rightness is judged by the intrinsic worth of an act. Without reference to action or consequences the absoluteness and objectivity of good and right are universally agreeable without any contradiction. Thus, while universal values are equally applicable to all; personal, social, economic and cultural values may be local specific and contextual.

Types of Values

A major issue relates to what specific values should schools or home transmit to pupils. Instead of providing a long list of values or trying to classify values for different stages of school education, it is meaningful to highlight the type of values to be promoted in our school system. It is very difficult to identify a particular set of values for a particular stage of school education since many of the values are relevant for more than one stage of school education. Again, a number of values overlap under

more than one type. The values frequently focussed for inclusion in school education are:

Inculcation of *universal human values* has been visualised as one of the important objectives of education in all societies. Universal values are considered as essential for the progress of the individual and society. Five core universal human values are - *Truth, Righteous Conduct, Peace, Love and Non-Violence*. Peace, non-violence, and love are linked together. The holy scriptures of Hinduism, Sikhism, Buddhism, Jainism, Islam, Christianity and Baha'ism uphold values of peace, love, brotherhood and fellowship. The Delor's Commission (1996) in a bid to harmonize increasing globalisation and concern for preservation of national cultural identities has emphasized the need to expand the canvas of universal values. The broader canvas of universal values include awareness of human rights combined with a sense of social responsibilities, values of social equity and democratic participation in decision making, understanding and tolerance of cultural differences and pluralism, spirit of caring, co-operative spirit, enterprising ability, creativity, sensitivity to gender equality, open-mindedness to change, sense of obligation to environment protection and sustainable development.

Values related to inter-religious communication or inter-faith dialogue highlight tolerance, cooperation, equality, peace and fundamental unity of all religions.

The attainment of the *spiritual values* have been considered as the highest value, the ultimate objective of all religions. Spirituality is different from religion. Spiritual values include exploration of consciousness through methods like control of mind, prayer and practice of yoga. The concept of spirituality cuts across all religions. The great religions across the world have propagated values like love, friendship, duty, courage, faith, happiness and peace which highlights fundamental unity of all religions.

Secular values lay stress on tolerance, respect for others, equality, goodness, individual autonomy and freedom in matters related to religion, morality and spirituality. Secularism has been interpreted as '*Dharma Nirapekshata*' (neutrality in religious matters) or as '*Sarva Dharma Sambhava*' (unity of religions).

Constitutional values in a democratic society include fundamental duties, economic, social and political justice, equality, liberty, freedom and fraternity.

Folk dance, folk songs, folk tales, music and paintings are affective modes of depicting the **cultural values** of the people, related to traditions, customs, beliefs, rituals, attitudes, festivals, folk lore and mythologies in a multi-cultural, multi-ethnic and multi-lingual society. One of the principle objective of teaching of Indian languages is to help the students to acquire cultural values through tales, stories, legends, myths etc.

Aesthetic values highlight search for beauty in art, dance, painting and music as well as of symmetry and beauty in nature, rhyme and rhythm in poetry.

Scientific values include concern for truth, scientific attitude, open mindedness, tolerance, logical enquiry and rational thinking. Science educators are of the opinion that scientific attitude helps the students to become more cooperative, responsible and critical.

Environmental values include love for nature, respect for the the rights of animals and plants, the need of protecting the environment, respect for laws of nature, acceptance of natural limitations and cycles, recognition of the inter-relatedness of all life forms and recycling of resources in place of wasteful consumption. It emphasises the need to adopt a humane approach to environment.

Personal values include good manners and good conduct in relation to children, elders, juniors, guests in everyday life, patience, etiquettes, extending help to others in times of distress, self-discipline, good character, honesty, courage, gratitude, humility etc.

Emphasis on **physical/health related values** is considered necessary not only for optimum physical and psychological functioning but for achieving all

round development of the personality of the child. Values like good health, strength, perfection, grace and beauty are important physical values.

Family values include values like courtesy, caring, respect for elders, sensitivity, love for children etc

Moral or ethical values include values related to code of conduct, honesty, integrity, discipline, duty, non-injury to others, focus to means, self-control, self-reliance, inquiry into the good, bad and ugly aspects of human behaviour.

Economic values include enterprising ability, thrift, efficiency, economy in spending etc.

Social values include cooperation, friendliness, cleanliness, team work, small family norm, compassion, courage, love of social justice, social sensitivity, social responsibility, tolerance, freedom, democracy, socialism, secularism, national integration, fellow feeling, civic sense etc

Values related to national integration in a multi-cultural and multi-ethnic society are equality, justice, integrity, respect for others, secularism, socialism, democracy, social harmony, patriotism etc.

There are values distinctive of each national culture. It is perceived that values distinctive of each national culture needs to be promoted in the schools. The need to inculcate *Indian values* has been strongly advocated by great Indian thinkers in Indian Schools. It is held that values like *truth, non-violence, tolerance* and *synthesis* are basically Indian. So also the values related to composite culture, culture of comprehensiveness and unity in diversity. Another Indian value the importance of which has been recognised globally is *peace*. Values like 'Human dignity' and 'equality' have been highlighted in Indian classical literature specially in *Vedas* and *Smritis*. The values like fearlessness, purity of mind, establishing oneself in the yoga for knowledge, charity, control of the senses, sacrifice, austerity, uprightness, non-injury to others, truth, absence of anger, renunciation, tranquillity, compassion, gentleness, humility, boldness, forgiveness, fortitude, absence of hatred, spiritual quest, critical intellectuality, ethical and artistic expression are also considered as basically Indian.

Pedagogy of Value Education : Salient features

The salient features of the pedagogy of value education follows .

- *Approaches of Value Education in schools*

Views and practices also differ in regard to approaches to value education i.e. how values should be transacted in schools. One may visualise four alternative approaches to values education, such as, value based education system, value education as a separate subject (direct approach); value education an integral part of all subjects (indirect approach or integrated approach); mixed approach.

- *Value based Education system*

In ancient India, the administration, economic life of the people, education system, trade and commerce and religious practices were inter-linked and based on values and ethical code of conduct.

- *Value Education as a separate subject*

This approach proposes Value Education as a separate subject with a definite curriculum, separate time slot, specially prepared text books and a specialized teacher. Teaching of values takes place through stories, biographies, poetry, recitation, songs, dramas, meditation, prayers etc. Teacher's special orientation on value issues and formal evaluation is part of this approach. Based on this approach, value education/moral education programmes have been developed and even institutionalised by NGOs nurturing schools in India and abroad.

- *Integrated Approach*

Under this approach, education for values needs to be integrated with the entire school system – all activities of the school - curricular and co-curricular, with the environment of the school and also with administrative set-up of the school. This approach is also known as whole school approach.

Values needs to be integrated to *curriculum, instructional materials and transaction of teaching-learning*. Attempts are also made to integrate values with different school subjects such as language, social studies, science, mathematics, arts etc. There are certain values which are characteristic of different school subjects. For example, teaching-learning of science is intended to strengthen the values like free inquiry, the quest for truth, open-mindedness, curiosity, objectivity, desire to know, scientific temper etc. Mathematics is associated with logical thinking, precision,

neatness, accuracy, perseverance. The purpose of social studies is to broaden the children's vision of human society in order to make them good citizens. Language, besides developing reading, writing, listening skills, is intended to stimulate imagination, creative thinking, sensitivity, appreciation and emotional development. Subjects like art stimulate the affective aspects of child's personality. The curriculum developers and textbook writers need to be conscious of the values inherent in each subject and utilize the potential of the subject for inculcation of the appropriate values.

Values are integrated the process of teaching - learning at two levels (i) the content level, (ii) transaction level Many lessons in the textbooks have value components in different forms. Certain values may be naturally integrated to the content areas of different subjects in various classes. Sometimes values lie hidden or given indirectly. It is therefore, important to identify focal points in a lesson/text which are value laden. Where natural integration is not possible, new contents related to value themes may be added as new topics/units. At the content level, the value components (explicit or hidden) appropriate and relevant to the lessons in the textbooks could be first analysed. The values are then deliberately brought into the context and focused during transaction. Apart from integrating values into the lessons the teaching-learning process is also made value-oriented through transaction of the subject matter even if value dimensions are hidden and not directly presented in the texts. Teacher adopts appropriate teaching - learning approaches by devising examples, experiments, discussion, interaction, questioning, role playing and, in short, through presentation of the subject matter in the perspective of values. Values are communicated not only at the cognitive (knowledge) level but also at the affective (feelings, emotions, attitudes) and the behavioural (skills and practices) levels.

Mixed Approach

The third approach combines both value education as a separate subject and the integrated approach. There are some institutions which see value education as a separate subject with separate slot in school time-table as well as make value education a common agenda for all school subjects and activities.

- Value education is concerned with the development of *total personality of the child* i.e cognitive, affective and conative (knowing, feeling and doing). For development of total personality, different type of values needs to be promoted through organisation of multiple programmes.
- Every student has the capability to conceptualise and practice values if suitable opportunities are available.
- The process of inculcating values involve following steps, *awareness, appreciation, exploration, thinking and reflection, conviction and commitment, action, value clarification and repetitive action or habit formation*. The child should learn values through repetitive action Verbal learning of values like other cognitive learning may not be effective.
- There is a need to *design value education strategies for different age groups/grades* such as for age groups 3-6/7 years, 7/8 years – 14 years and 14 years and above In other words, value education strategies may be developed for standards I-V, VI - VIII, IX – XII.
- *The role of parents* in value inculcation is equally important. Value learning during childhood takes place by listening to parental instructions. The influence of home values on the personality development of the child is very significant There is need to evolve strategies for sensitisation of parents in developing societies.
- *Values are presented through materials* in the form of biographies, rhymes, poems, essays, inspiring passages/stories, anecdotes, songs, riddles, comic strips, paintings, agreement/disagreement sheets, graphics or visual materials like symbols, drawings, posters, charts, cartoons, graphs, pictorial illustrations, albums, supplementary reading materials etc. Strategies of material development include development of supplementary reading materials based on inspiring stories and parables drawn from different religion highlighting universal core values, prototype materials including print, audio vide and multimedia; development of orientation/instructional material for training of school teachers, head-masters and teachers educators and sensitisation materials for parents. (both print and non-print)

Activity 1

- What type of values are promoted in the schools of your country?
- What approach/approaches of value education are followed in schools of your country?
- What type of materials are used for value education in the schools of your country?
- Highlight the process of value education followed in the schools in your country?

There are variety of methods and approaches to explore values. Some of the important methods and strategies are.

- *Value clarification* is a method by which the teacher help the students to conceptualise the nature of specific values required for achieving different objectives. For example, for character development/personality development what types of values are required? For development of willpower or spiritual development what type of meditation and simple yogic exercises are required to be undertaken? Through value clarification method the teachers also help the students to make choices/alternatives in arriving at a decision without any external pressure. Teacher help the students to reflect on possible consequences of different choices/alternative choices. The students are to choose right values from among competing value preferences, internalise them and practice them. Finally, the teacher help the students to identify best alternative with reasons. Stories, important incidents from the life of great men/national heroes, quotations, explanatory notes prepared by the teacher could be used for value clarification. Whenever the students exhibit depression, have misunderstanding with friends, revolt against authority, exhibit discipline problems the teacher can help the students through value clarification and show him/her the right path. Value clarification sessions could trigger discussion and reflections and generate objective responses to value situations and to provoke judicious action.
- *Persuasion* is the process of convincing the learner by the teacher or by the parent to accept certain values through critical analysis and logical reasoning.

- *Problem solving* is another approach adopted by the teacher where a value dilemma is presented to the learners and asking them to take a desirable decision.
- *Creation of a value based school environment* has tremendous impact on the life of the students. For creation of a value based school environment all activities of the schools needs to be value based.
- *Role playing* is a technique where the actor or actor (s) play the role of another person with a focus on value issues with the intention to disseminate value messages
- *Simulation* is a technique in which the learner are asked to imitate the personality of historical characters operating in a simulated situation identical to what has been depicted in the lesson
- *Group discussion* is a strategy where various aspects of a story or a picture are presented by the teacher and students are asked to react. Alternatively, the students are encouraged to discuss on value issues within a frame.
- *Meeting of teachers with parents* on value inculcation
- Display of quotations of great thinkers, on the theme of value education and fundamental duties in suitable corners of the school
- *Studying biographies of great men* is an approach wherein students are encouraged to study and could be asked to analyse their contribution and to highlight the value they cherished for a cause.
- Teacher could also create *emotionally charged situations* and asked the students to react : *positive* emotions like love, joy, sympathy, sense of caring promote development of values. Children may react in either desirable or undesirable ways. Desired emotional reactions needs to be reinforced
- *Life skill education* has great potentiality to educate children about how to control negative emotions like anger, lust, stress, tension, jealousy and egoism.
- *Reflection and visualisation* activities encourage students to understand abstract concepts. Students may visualise a non-violent world and they could be asked to share their visualisation in a group. Children are encouraged to reflect on values and experience them artistically and creatively through art, work, dance

and music. Open-ended questions may be asked to explore what the students think after the students have reflected on a value issue

- *Practice of silence, prayer, meditation and yoga* help student in concentration, which is a pre-requisite for study.
- Students *may prepare slogans in regard to different values and exhibit them on the walls, may draw pictures, may participate in dance, drama and involve themselves in art education activities* centering identified values
- Different type of *self development* activities may be designed. Self-development has many facets such as self-confidence, self-discipline, self-respect, self-control, self-analysis, self-learning etc. There is a need to design activities for development of multiple aspect of the 'self'.
- Activities may also be designed for development of *social skills* where students are able to explore values in relation to others. Development of interpersonal communication skills and skills of social cohesion are important social skills
- *Experiential approach* needs to be adopted wherein the children may experience the value through different type of action. In a group situation the student may be asked to share their experiences
- *Positive verbal and non-verbal reinforcements* needs to be given to strengthen positive behaviours of the students. The positive values acquired by the students needs to be acknowledged, encouraged, recognised and praised which will have a positive impact on the mind of the children. The teacher needs to provide immediate reinforcement through praising whenever student acquires a new positive behaviour
- Today in all societies the teachers are concerned about the problem related to student discipline, misbehaviour and violence. Activities needs to be designed to inculcate *value based discipline or self discipline*. The classroom rules about norms of behaviour may be formulated by the students and the teacher through cooperative thinking. A collaborative approach may be adopted for developing guidelines concerning students desirable classroom behaviour.

Activity 2

- What methods and strategies are commonly used by the teacher in schools of your country to facilitate explorations of values by the students?
- What methods and strategies are commonly used by the parents to facilitate exploration of values by children in your country?
- What other methods and strategy you could visualise Write briefly

Value Education Programmes in Schools

Multiple programmes of value inculcation may be organised in the schools. The programme are :

- During morning Assembly value based songs, poems, stories, parables, anecdotes, quotations and examples drawn from different religions, narrations, anecdotes – significant incidents from biographies of great men, real life incidents, events reports from the newspaper etc could be presented to the students
- preparation of wall magazine with the help of clippings, drawings, community singing programme
- observance of national and international days
- celebration of festivals of different religions
- special programmes/exhibition, camp on communal harmony, national integration and world peace, organisation of leadership and national integration camps
- organisation of various co-curricular activities including sports, games and music, etc essay competition on the lives of great personality, elocution and debates

- social services during holidays and outside school hours, social services during emergent situation like earthquakes, floods, fire drought, accidents etc
- personality development/character development programmes
- organisation of social awareness and sensitivity camps
- inviting persons of character to deliver lecture on values
- organising thoughts of the day corner
- organisation of School Clubs on environmental issues
- organisation of summer courses and spiritual retreats.

Activity 3

- What type of value education programmes are organised in the schools of your country?
- What other programmes of value education you could visualise. Write briefly

Evaluation of Value Attainments

Evaluation of value attainment has always been considered as a difficult area. The issue has not been much debated since it was perceived that evaluation of value education is a difficult task. It has been argued that measurement of values attainment such as love, truth, peace are not quantifiable, unlike evaluation of knowledge, understanding and skills. It has been pointed out that the evaluation and assessment of value attainment need not be taken in a strictly formal sense. The purpose of evaluation is much wider and deeper in the context of values. It should serve the twin purpose of monitoring the learner's progress in value attainment as well as the measurement of the impact of value education programme in terms of behavioural changes in the students and changes in climate of the schools.

To a certain extent, it is possible to evaluate the level of value attainment of the school children. The evaluation of value attainments needs to be based on observation for a considerable period of time. The habits of the students to certain extent are the reflection of their attitudes and values. The level of consistency with which an activity

is performed is also the indicator of a student's mindset. The classroom teacher has the opportunity to observe the students formally and informally over a considerable period of time. The level of involvement or 'volunteerism' by a student for a particular activity may also reveal the level of value attainment. It has been observed that some students willingly donate blood and participate in different types of social service activities. It is also not difficult to observe the child's level of cooperation and ability to work with others which are considered as an important values in a democratic and multi-cultural society. A single method or tool may not be adequate for assessment of value attainment by students. However, the innovative teacher may work out multiple assessment procedures such as observation, questioning, discussion, rating performance during group activities, report of teachers, parents and peers. Evaluation of values needs to be a continuous process.

It is possible for the teacher to evaluate changes in behaviour pattern of the students to a considerable extent. Instead of individual evaluation teacher may develop following types of assessment Proforma for group evaluation through observation of group activities which may provide feed back to the teachers.

Percentage of students

Traits	Excellent	good	Average	Poor	Very poor
Self-confidence in the student					
Self - discipline					
Self-respect					
Respect toward peers					
Respect towards adults					
Skill to resolve conflicts					
Level of cooperation					
Level of Responsibility					
Honesty					
Ability to concentrate					
Social skills					
Quality of school environment					
Level of consistency in performance					
Level of volunteerism in the student					

Activity 4

- Has any tool been developed for evaluation of value attainments in schools of your country?
- What is your views on evaluation of values?

Teacher Education initiatives

Teacher education curriculum needs to be a powerful instrument for implementation of the pedagogy of value education. Value orientation to pre-service teacher education programmes would necessitate a qualitative transformation in its content and processes – value driven foundation courses or theory, pedagogy, student teaching, methods of training and administration. For example, it would call for developing a new value driven philosophy of teacher education.

University marks should not be the only criteria for selection of students into pre-service teacher education courses. The level of value orientation, the commitment and dedication of the candidates for teaching profession needs to be taken into consideration for admission into pre-service teacher training courses. There is a need to develop value tests to measure the value climate of the school and screening students for admission into pre-service teacher education course at all levels.

The following themes needs to be integrated to pre-service and in-service and in-service training programmes.

- Value awareness : Needs of value education definition, concepts, types.
- Approaches of Value Education
- Pedagogy of Value education : Salient features
- Teachers role in value education
- Methods and strategies of Value Education
- Value Education Activities
- Skills involved in creating Value based atmosphere in schools
- Skills involved in organizing value education activities
- Skills involved in Evaluation
- Value based school management
- Adult presentation skills
- Material Development

In in-service teacher training programmes the number of themes to be included and the degree to which the themes are explored will vary depending on the duration of the training programme i.e. 3 days, 5 days, 7 days, 15 days etc.

Assessment of the Needs of the trainees

Before the organisation of the training programme, needs of the clientele groups need to be assessed either through sending questionnaire or through informal discussion during the first session of the training programme. The clientele groups could be teachers working at Primary/Upper Primary/Secondary/Sr.Secondary Stages, Principals/Head Masters of Primary or Secondary Schools or Educational Managers/Inspectors of Schools. On the basis of assessment of training needs the themes could be restructured.

Time Schedule

Time schedule needs to be developed based on local needs and duration of the programme.

Activity 5

Now, Reflect on following questions and find answers

- Could you name a person whose influence in your life you feel constantly?
- Could you describe the values of the person you like most and how these values are different from others?
- Recite a poem or tell a story which you like most? What values have been highlighted in the poem or the story?
- Name a book which you like most? What values have been projected in the book?

- What is your favourite song? What values have been reflected through the song?
- Identify the values which have influenced you to become a teacher?
- Identify five values that have helped you to shape your life?
- What are the values that the teachers should practice in schools?

You may have to share the answers with other trainees. On the basis of sharing of information you may write the responses in a separate sheet.

Activity 6

Read the following passage carefully

In the school teacher transmit their values by their words, behaviour, attitude and action. Teacher acts as a role model and living examples of values. Teachers behaviour, attitude, actions can model various roles which are silently imitated by the students. Teacher should be a reflective practitioner who stimulates, provokes, informs and sensitise the learner with reference to multiple value situations in life. The first rule of value education is to suggest and invite and not to command or impose. Teacher should have a positive attitude. Love, acceptance and empathy can do wonders. There is a need of a friendly dialogue between the students and the teacher. True dialogue cannot succeed without true love and affection, which is the real basis of pedagogy of values. What is the methodology of winning hearts of the children? It is a matter of training or skill? For getting the answer, follow what the mother does for the child.

Now, reflect on the following questions :

- What values do you transmit to your students through your words, behaviour and action every day?
- How do you inform, stimulate, sensitise and provoke your students with reference to multiple value situations?
- What values you would like to model for your students?
- How to develop an atmosphere of acceptance, trust, caring, respect and love for students in the school?

Activity 7

Read the following text carefully:

Many of you might here visualized how school and classroom environment to be. Imagination of people differ in regard to the environment of school and classroom to be. You might have visited a number of schools during practice teaching or internship of teaching programme. You might have been impressed by seeing the school building, the library, the laboratory, the play ground and other physical facilities available in some schools. Some schools excel in examination results i.e the high percentage of first divisioners though the activities related to play, music, arts are limited. Some schools are rated as quality schools because their products gets admission to engineering, college medical college and business schools. On enquiry you could know that the students of the schools are to attend coaching classes in the evening on payment of high fees and teachers also teach in coaching classes in the evening. One fine morning you decided to visit the classroom and interact with the teachers, students and the principal. You also observe the activities of the school right from morning till afternoon. Since it is a residential school you have also decided to observe what students are doing in the hostels. You also observed the activities of students in play ground. You also had time to interact with principal and non-teaching staff.

Now reflect on the following questions.

- How did you like the school environment?
- How did you feel in the classroom?
- How did you like the daily programmes of the school?
- How did you like the behaviour of the students?
- What about the behaviour of the teacher towards students?
- How did you like the functioning of the Principal?
- How did you like the office rooms of the school ?
- How the non-teaching staffs were behaving?
- Make a critical assessment of positive and negative values from your observation and interaction with the school and its environment

- What is your idea about value based school environment?
- How values could be integrated to all activities of the school?
- What is your ideas about value based school environment?

A Value based teacher:

- Practice qualities like love, warmth, caring and kindness for children
- Provide opportunities to students to express their feeling and ideas freely
- Encourage open and flexible to students ideas
- Listen attentively what the students say
- Is enthusiastic about students learning
- Helps students to resolves value conflicts
- Stimulates provokes, informs and sensitise the learner to multiple value situations
- Provide suggestions and invite opinions
- Possess positive attitude to students ability to learn
- Guide low learners
- Provide equal treatment to students irrespective of sex, social class, and castes
- Uses verbal and non-verbal reinforcement
- Creates an atmosphere of trust
- Communicate with the students spiritually and emotionally

Let us sum up

Value education has emerged as a significant intervention in school education, though the degree varies from country to country. There are multiple approaches, methods, strategies and programmes of value oriented education in schools. The schools needs to design activities depending on its objectives, availability of resources and needs of the Learners. Pedagogy of value education needs to be integrated

focussed in pre-service teacher education. During teacher training programmes the process of value education needs to be highlighted. There is need to develop tools and tests to measure the level of value attainments

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Emerging Issues in Evaluation and their Implications for Teacher Education

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Emerging Issues in Evaluation and their Implications for Teacher Education

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Evaluation is an important component of educational process. The merit of any educational system depends on the standards of attainment shown by its products in terms of competence and excellence. In fact the quality of education is directly linked with the quality of evaluation. The National Curriculum Framework for School Education, (2000) observes, “Teaching for successful learning cannot occur without high quality evaluation”

The present scenario of evaluation at different stages of schooling in the country does not present a very bright picture as it suffers from a number of imperfections. One of the reasons for the problem is that school teachers are not given any training in evaluation procedures during their pre-service teacher education programmes. They are not aware of the concept of evaluation, what is involved in the process of evaluation and how to utilize results fruitfully. The situation has arisen because the teacher educators themselves are not aware of the issues in evaluation and their importance for quality education. This module will help the teacher educators to have an idea of the concept of evaluation, types of evaluation, purposes of evaluation, emerging issues in evaluation and their implications for teacher education. It will help them to develop a perspective in educational evaluation which will enable them to design pre-service and in-service courses in evaluation for teachers at primary level.

Objectives

The objectives of this module are that after going through it the teacher educators will be able to.

- differentiate between measurement and evaluation.
- understand the concept of evaluation.
- know what are the types of evaluation.

- understand the purposes of evaluation
- get an awareness about the emerging issues in evaluation
- have a change in their perspective regarding evaluation
- understand the implications of educational evaluation for teacher education.

Concept of Educational Evaluation

Evaluation is a part of life. It includes evaluating any object, individual, institution, position of an office, event, trend, etc. However, educational evaluation deals with students' evaluation which includes the assessment of the performance of the students in the areas of their personality development in terms of intellectual, social and emotional development after they have been provided learning experiences through classroom processes. In educational parlance, these areas of personality growth are called scholastic and co-scholastic areas or curricular and co-curricular aspects.

Traditionally, evaluation was not known to the educational practitioners. The teachers knew only testing and measurement. Even today many teachers confuse it with these two terms. When they give a test to their students, they think that they are evaluating their achievement. Testing is only a technique to collect evidences regarding pupil behaviour. Measurement on the other hand is limited to quantitative description of the pupil behaviour. The other related terms like examination, tests and assessment are also used synonymously with evaluation. Examination is a process of collecting evidences about pupil's achievement. It includes developing a number of tests, conducting them and then marking or grading them for collecting the evidences for reporting the achievement of the students. A test is a tool consisting of a number of questions for finding out the knowledge, aptitude, intelligence, achievement etc. of the students. When a test is scored and a numerical mark is assigned, it is called measurement. Assessment or evaluation is a more comprehensive term which includes all the above terms. Assessment is used by American educationists nowadays, more than the term evaluation, though 'evaluation' also was introduced for the first time by R. W. Tyler while working on an experimental study of secondary

education in America. Evaluation includes both quantitative and qualitative description of pupil behaviour. It also includes value judgment regarding the worth or desirability of the behaviour measured or assessed. Therefore, Gronlund (1962) has indicated this relationship in the following equations:

Evaluation = quantitative description of pupils (measurement)
+ value judgment

Evaluation = qualitative description of pupils (non-measurement)
+ value judgment

Thus, evaluation may not be based on measurement alone but it goes beyond the simple quantitative score. For example, if a child gets 60 marks in English language test, it alone does not tell us whether his achievement is satisfactory or not. It is only when we compare this mark of 60 percent with the marks obtained by other children in the class or with certain criteria laid down in advance, or with the child's own marks in previous tests, we are able to judge or evaluate whether his achievement in English is satisfactory or not. Thus, a student's achievement may be viewed at three different levels:

1. Self-referenced - how the student is progressing with reference to himself/herself.
2. Criterion-referenced - how the student is progressing with reference to the criteria set by the teacher.
3. Norm-referenced - how the student is progressing with reference to his/her peer group.

Evaluation has been defined by various educationists in different ways.

Tyler (1950) defined evaluation as "a systematic process of determining the extent to which educational objectives are achieved by pupils", which indicates that evaluation is a systematic process. However, this omits the casual, informal or uncontrolled observation of the pupils. The definition also implies that objectives of education have been identified in advance. Without predetermined objectives, it is not

possible to judge the progress, growth and development of students.

Another well known definition has been provided by Cronback (1963), Stufflebeam (1969) and Alkin (1969). According to them evaluation is providing information for decision making.

In recent years evaluators like Scriven (1967), Eisner (1979), and House (1980) have a general consensus that evaluation is the assessment of merit or worth whereas others like Stake (1967), Guba and Lincoln (1981) think that it is an activity comprising both description and judgment.

In education the concept of evaluation denotes the process of collecting valid and reliable information about the level of pupil attainment with respect to the desired areas of pupil growth; analyzing, synthesizing and interpreting the information; and using the same meaningfully for making judgment and taking decision for its effective use in the improvement of teaching and learning. Thus evaluation has the following four components:

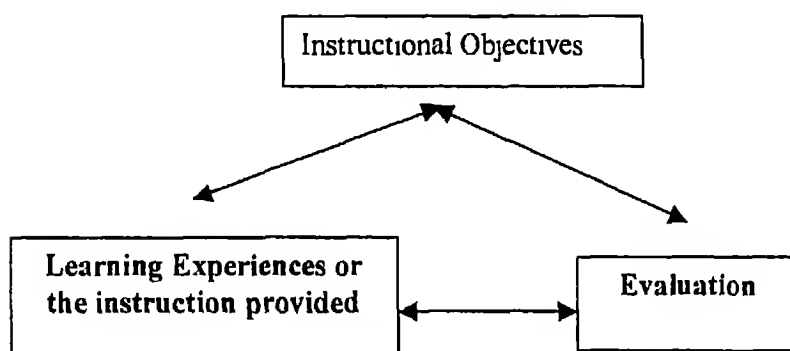
- Information gathering
- Information processing
- Judgment forming and
- decision making

Considering these components, evaluation may be visualized as a systematic process of collecting evidences about students' progress and achievement in both cognitive and non-cognitive areas of learning on the basis of which judgment are formed and decisions are made.

Evaluation in Teaching and Learning

Evaluation is an integral part of any teaching and learning programme. Whenever a question is asked and answered evaluation takes place. Thus, both teaching and evaluation overlap and merge into each other. In fact, it is not possible to have teaching and learning without evaluation

Both teaching and evaluation are based on the instructional objectives which provide direction to them. Instructional objectives are those desirable behaviors which are to be developed in students. It is for achieving the instructional objectives that instruction is provided and it is to see whether the instructional objectives have been achieved and to what extent, that the evaluation is made. The interrelationship of objectives, instructional process or the learning experiences and evaluation in a programme of teaching can be expressed more clearly through the following diagram.



The above diagram illustrates that the three components of teaching and learning constitute an integrated network in which each component depends on the other. Thus, through evaluation, the teacher not only assesses as to how far the student has achieved the objectives of teaching but also judges the effectiveness of the learning experiences, methodologies, means and the materials used for achieving those objectives.

Activity

1. What is evaluation?
2. How is evaluation different from measurement?
3. How will you know whether the achievement of a student is satisfactory or not?

Types of Evaluation

Evaluation is mainly of four types. Placement, Formative, Diagnostic and Summative

Placement Evaluation/Entry behaviour

Placement evaluation is meant for finding out the position of the child in the initial stage of learning. When a teacher tries to introduce some instruction to the children in a class it is imperative to know where a child can be placed in terms of his previous knowledge so as to enable him to be ready for further learning. This placement is a very important stage of evaluation as it gives the teacher an idea of the weakness and strength of the child's learning. If it is not ascertained and the instruction is imparted to the child probably he will not be able to understand the forthcoming concepts because he does not have the sound background of previous related learning. The child will be able to attain the desired abilities and competence produced through new instruction only with a strong background otherwise his weakness will continue to persist and his attainment will continue to be low. Therefore, to avoid this situation and to enable the child to be strong in the concept and competence placement evaluation is very essential.

Formative Evaluation

Formative evaluation is in-built in the process of teaching and learning. It is desirable to know whether a student has developed a certain ability stated in the objective as well as it is also required to know about his progress during the course of teaching and learning. If there is any deficiency in his learning that can be removed by re-teaching. This system of evaluation is known as formative evaluation. The main purpose of this evaluation is to find out the extent to which the child is following the instructional process. It provides feed back to both the teacher and the student regarding the progress of the student and the efficiency of the teaching methods so that teaching learning process may be improved. This type of evaluation can be done by means of unit tests, informal class tests, assignments, and other classroom activities. This evaluation is continuous in nature

Diagnostic Evaluation

Diagnostic evaluation as the name itself suggests is meant for diagnostic purposes. It helps in finding out the learning difficulties of a child in a particular subject with reference to conceptual understanding, process of learning, language deficiency, etc. Sometimes formal testing helps in diagnosing the hard spots of learning but sometimes specific tests are prepared with a definite purpose of diagnosing the learning problems. The learning problems are found mainly in the area of language and mathematics. Regarding language, spelling, discrimination between letters, vocabulary, grammar, etc., may be the sources of problem for children whereas in mathematics the problem may be due to lack of understanding in computing and recognition of symbols where the children generally commit mistake. The teacher is supposed to go deep into the problem through these tests and find out the specific difficulty of the child in learning a concept or a particular step in doing a sum. While carrying out formative evaluation the diagnostic test supplements the process of evaluation. If diagnosis of hard spots of learning is properly done and the suitable remedial measures are taken, the learning attainment as well as learning pace of the weak and low achievers will certainly improve.

Summative Evaluation

Yet another type of evaluation is summative evaluation. It comes at the end of the course or the term. It involves a formal testing of the pupil's achievement and is used for grading, ranking, promoting and certifying the achievement of the students. It does not provide any scope for diagnosis and remediation.

Activity

1. What are the types of evaluation? Tell their differences in a tabular form.
2. Which type of evaluation is most necessary in our schools and why?
3. Why is it important for a teacher to carry out diagnostic evaluation?

Purposes of Evaluation

Evaluation serves a number of purposes in education. Some of the well known purposes are to grade, rank, classify, compare and promote the students. It is also used for certifying the completion of a course, selection of students for admissions or

scholarships, and for predicting their future success in different endeavours. However these are the purposes of end-of- the term evaluation.

The basic purpose of evaluation in school has been to bring about quality improvement in education which it does by providing feedback regarding pupil learning, classroom teaching, appropriacy of curriculum and course content. It also helps bring about all round development of the students' personality when it is used for developing their non-cognitive capacities.

Improvement of Learning

Evaluation of pupil progress contributes directly to improvement in pupil learning. This is done in a number of ways.

Evaluation procedures used help clarify for the pupil what it is that the teacher wishes him to learn. Feedback from evaluation provides him with concrete information about his progress. It also indicates his readiness for future learning activities. Through this continuous evaluation the teacher knows the extent of learning at every stage. If there are any hard spots or gaps of learning, appropriate remediation can be provided. For students, who show good progress, enrichment measures can be initiated. Thus, evaluation helps in improving learning through diagnosis and remediation. It enables the teacher to keep a continuous and regular watch on the pupil development.

It is only evaluation of learning which motivates the students to learn. If there is no evaluation in classroom, perhaps the students would not study at all. Evaluation also promotes competitive spirit in children and stimulates them to show their excellence.

Besides, there are other uses of evaluation results which have relevance for parents. Through the results the parents can know the weak and strong points related to the learning of their children. If the evaluation in school is being done in a

comprehensive manner, the teacher can also report the overall personality growth of the child to the parent. This will develop a better co-operation between the teacher and parents for the progress of the child. Parents can be extra careful towards their wards in case of any particular deficiency

Improvement in Teaching

Evaluation can also promote the accountability of the teachers. The children's results can tell whether the poor performance of the students is due to poor teaching, defective methodology or due to absenteeism of teachers or callousness in teaching. Thus evaluation can work as an important instrument to show the negligence in teaching

Professional development of the teachers is almost directly related to the feedback through evaluation. A teacher earns a reputation on the basis of the result shown by the pupils whom he has taught. If the students are not showing desirable learning outcomes, then he may have to think of changing his strategies of teaching, improving the instructional material, updating his knowledge or going for a refresher course, thereby exploring new approaches. These steps will automatically help his professional development

Renewal of Curriculum or Course Content

Evaluation also gives information regarding the effectiveness of the course content. There may be a certain curricular area which may prove to be difficult for the students as their maturity level is not developed enough to cope up with it. This fact can be identified through evaluation and its feedback. If it is found out consistently by the feedback of the evaluation of different pupils that a particular curricular area is not suitable for them, it may be modified. Such information is useful in judging the appropriateness of the pre-determined objectives of the course also. Hence, the evaluation can provide a basis for curriculum revision.

Development of Non-Cognitive Capacities

In today's world the development of intellectual powers is not enough. The development of social intelligence, emotional intelligence and physical aspects of personality is also as vital as the development of mental intelligence. The prime concern of education is to bring about an all round development of human personality which can be done by developing non-cognitive capacities of students along with the cognitive capacities. This can be ensured only when a school takes up the system of evaluating these aspects of children's personality. The comprehensive evaluation takes into cognizance the learning outcomes of both the scholastic and co-scholastic domains of human personality. The areas included in the co-scholastic domain are the social personal qualities, interests, attitudes, values and physical growth of the students which need to be developed and evaluated consciously in the context of present day educational system.

The evaluation of co-scholastic areas in Indian condition, as observed by Agrawal (1998) not only brings to light the hidden qualities in children, but also prepares them for the future. There are certain traits, qualities, attitudes and values which are needed by an individual for success in life. For example, qualities of regularity, punctuality, discipline, initiative, industriousness and cooperation are valued in professional life, qualities of respect for others, truthfulness, emotional stability are required for a happy personal life.

Another reason why it is important for teachers to know about the students' attitudes, interests, values and general make up is that this knowledge can be used to remove their learning difficulties and enhance their academic achievement. Quite frequently the learning difficulties of students are related to their personality, (Edward, 1997). They are influenced by the students' attitudes, values and interests. If a teacher knows Sachin likes sports, she might have him read sports magazines in order to help improve his reading. Thus teachers can capitalize on the interests and attitudes of their pupils. (Mehrens and Lehmann, 1987)

Activity

1. For what purposes is the end-of-the-term evaluation used ?
2. What is the main purpose of evaluation in school?
3. How does evaluation help in developing non cognitive capabilities of students?
4. Differentiate between scholastic and co-scholastic areas.

Evaluation in Indian Education

After independence the Indian system of education was examined and different Commissions and Committees were set up with a view to overhauling the system to improve its quality. It was pointed out by these Commissions that examination system was the most problematic area and needed tremendous reforms. The concept of measurement was in vogue at all levels of school education and it started dominating the teaching learning process. The evaluation was confined to subject specifics related to intellectual growth of the student. In this the public examination played a significant role. It so much dominated the educational scene that even teaching learning process at lower levels was geared towards it. However, the concept of internal assessment was envisaged with a view to introducing assessment of emotional and psychomotor aspects of personality and widen the canvas of evaluation. It was followed by the concept of continuous and comprehensive evaluation (CCE) which was introduced by the National Policy on Education (1986). It categorically recommended introduction of CCE in its section on Examination Reform. Consequent upon this, various initiatives were taken by the Boards of School education and NCERT in developing the schemes of CCE for different levels of schooling.

Continuous and Comprehensive Evaluation

It is necessary to discuss the concept of CCE in the light of the above background. Continuous and comprehensive evaluation refers to two significant aspects of evaluation – continuity and comprehensiveness. Continuity relates to the system of testing in which the evaluation is integrated with teaching and learning. It calls for regularity of assessment during the whole session with the frequency of class tests, unit tests and term tests at reasonable intervals. The tests may be followed by the

diagnosis of hard spots of learners and provision of remedial inputs to remove the gaps in learning. S. Rajput and et.al. remarked, 'this continuity can be made feasible by employing both formal and informal methods of assessment' It may be pertinent to add that traditional system hardly adhered to the concept of regularity of testing and continuous assessment.

The second aspect is comprehensiveness. This refers to the areas of assessment which covers both scholastic and co-scholastic aspects of pupil growth aiming towards all round development of personality. This classification has clearly been brought out in NCFSE (2000) replacing the terms cognitive and non-cognitive aspects. In scholastic aspect cognitive growth in specific subject areas and in co-scholastic aspect the growth in affective and psychomotor areas are covered. If scholastic areas help in intellectual growth the co-scholastic areas promote the development of physical growth, social personal qualities, interests, attitudes and values. The term comprehensive also includes the variety of techniques and tools employed for the assessment of both the areas. Therefore CCE is multi-dimensional as it involves multiple techniques, tools and persons like teacher, pupil, peer and community.

Though the Indian educational system is striving hard to institutionalize CCE in it, unfortunately it has not yet been assimilated in the state run schools. However, it has taken off in privately managed schools to some extent. Therefore, it is still an issue to be resolved.

Activity

1. Describe the pattern of evaluation followed in your state.
2. Explain the concept of Continuous and Comprehensive Evaluation

Issues in Evaluation

Evaluation at primary level has a plethora of problems which are rampant in the system and affect the quality of education. Inadequacies in teacher's understanding of the concept, purpose and use of evaluation procedures is one of the major problems.

In fact the teachers are conversant with the concept of measurement only and they are using it in their evaluation process. This narrows down the scope of evaluation and restricts its purpose. Besides, they just employ the summative approach of evaluation in the absence of their awareness regarding formative approach of evaluation. Obviously the input of diagnosis and remediation is completely lacking in the procedure of evaluation. Similarly the teachers also do not have clear understanding of the concept of continuous and comprehensive evaluation due to which they are handicapped in using the concept of Minimum Levels of Learning in teaching and evaluation. As far as comprehensiveness of evaluation encompassing the scholastic and co-scholastic area is concerned is also ignored completely in their evaluation procedure. They are unaware of the concepts like informal testing, alternative procedures of testing etc. Moreover they do not interpret the non-detention policy also in genuine and true sense as they probably are not aware of the fact that continuous evaluation is the back bone of non-detention policy. These problems are coupled with some significant issues which need to be addressed urgently

The issues are given below:

Misuse of non-detention policy

The concept of non-detention policy has been misinterpreted by administrators, principals and teachers. Instead of ensuring a particular level of learning, it has been linked with 60% to 75% attendance. With the result, even after passing the primary stage for schooling, many children are not able to read and write properly. This is a matter of grave concern.

Use of grades in place of marks

Student's performance should be reported through grades instead of numerical marks. It is because the raw scores as are being used at present, do not portray a true picture of student achievement. Instead of a single mark which may be ridden with a number of errors, an ability band representing a range of marks may give a realistic assessment of learner's capabilities. Grading, though recognized as a better system than marking, is not being implemented by the examining agencies and schools yet.

Issue of pass/fail

In the present system below 33% are branded as fail. The system is demotivating and demoralizing for the students. If grading is introduced in the system, this issue may be resolved.

Continuous and Comprehensive Evaluation

Continuous and comprehensive evaluation should be implemented at all stages of school education for assessing both scholastic and co-scholastic aspects of pupil growth. Development and evaluation of co-scholastic areas hitherto have been neglected by the schools because the syllabus for these areas including both co-curricular and social personal qualities have not been specified. The continuous aspect of evaluation also leaves much to desire as diagnosis and remediation have not become a part of the system.

Examination Stress

The present examination system creates psychological fear and tension in students. Though the stress is not so much at primary level as it is at secondary level, still the continuity of assessment will help in removing any stress from the minds of young learners.

Curriculum load as a barrier to achievement level

The Report of the National Advisory Committee, 1993 titled 'Learning without Burden' stated, "A lot is taught but little is learnt or understood". This statement indicates the problem of heavy curriculum load on young learners. It demotivates the children and hampers their learning. The school becomes a joyless place for them. Even at home they hardly get time to play and explore the world due to the pressure of studies.

Board Examination at Primary Level

Almost all the commissions, committees and even the NPE, 1986 have expressed that external examinations should be reduced. However, there seems to be a reverse trend and many states have external examination even at primary level. This results into the issues of stress and pass and fail.

Trusting the teacher

The CCE is not being implemented in the schools because the society does not repose faith in the teachers. If school based evaluation is to be strengthened, the trust in the teacher is a must. Simultaneously on one hand, the teachers will have to prove themselves worthy of it and on the other, should be held accountable for the achievement of the children.

Evaluation in multigrade schools

Multigrade schools are generally single teacher or two teacher schools where four or five classes are taught simultaneously. These teachers have hardly any concept of evaluation and on top of it they have paucity of time to manage evaluation systematically. Neither the teaching nor evaluation is up to the mark in these schools. This situation is a matter of concern.

A teacher training programme should have a scope for discussing these above mentioned issues with the teachers who do not take up these aspects as issues at all. The discussion might help them in changing their attitude towards their approach to evaluation.

Activity

1. Find out the position of Board exam at primary level in your State. What is the perception of parents?
2. Explain your perception of non-detention policy? How do you use it in your school?

Implications for Teacher Education

The teacher education has a prominent responsibility in filling up the learning gaps of the teachers with respect to evaluation. It is observed that the teacher training programmes at both pre-service and in-service level are pre-dominantly tilted towards teaching methodologies having very little scope for evaluation and its procedures. In view of this various implications for teacher education emerge. These are given as under:

- Pre-service B.Ed. courses for primary teachers need to be strengthened by including a full-fledged paper on educational evaluation. This paper should cover the concepts of evaluation, continuous and comprehensive evaluation, non-detention policy, minimum level of learning, its teaching and evaluation, diagnostic testing and remediation, etc. Besides, the objectives specification and their implications for testing, tools and techniques and how to prepare good quality tools should also form the part of this paper.
- In-service courses should be organized particularly focusing on different aspects of evaluation. Stress should be laid on practicum related to testing through joyful learning, activity based testing, informal testing, alternative procedures of testing etc. Theoretical explanation generally do not help the teachers to translate concept into practice.
- The large number of teachers in itself is a force to reckon with. The efforts made by institutions like Colleges of Teacher Education (CTEs), University Education Departments, Regional Institutes of Education (RIEs), NCERT and NCTE have strengthened the teacher training programmes to a great extent. Still it is quite meager as far as imparting training in evaluation to all teachers is concerned. To enhance the number of trained teachers short term certificate and diploma courses can be developed and organized for the willing working teachers to equip and enrich themselves with different aspects of evaluation.
- Another important strategy could be thought of regarding extending the training input to greater number of teachers. This strategy may be training practicing teachers through distance mode. For this the NCERT and NCTE can take up the programmes of preparing material in print and electronic media that may be used to train the large number at the same time.
- Evaluation material for the use of teachers in their classroom processes need to be prepared. The SCERTs, DIETs, and Teacher Training Institutions must shoulder this responsibility in their respective states.
- Content enrichment programmes should also be organized for the teachers who teach the subject in which they lack content knowledge. At primary level one teacher is expected to teach different subjects whether he/she is adequately equipped to teach those subjects or not keeping this fact in view these programmes should be a mandatory step for in-service courses in order to ward off the defective teaching and evaluation.
- Besides, the component of action research may be also the part of teacher training in which the prospective teachers may be trained as to how to undertake an action research and use its finding for improving achievement and solving problems related to student performance. In their turn the teacher training institutions may also take up research studies to solve the problems related to testing in classrooms.

The following themes may be suggested:

- Under achievers and role of teachers
- Self-evaluation and peer evaluation by students- effectiveness of these techniques of evaluation
- Evaluation in multi-grade schools – its nature and scope
- Comparative study of the impact of imparting instruction through mother tongue and foreign language on learning achievement
- Impact of diagnostic tests and remedial exercises on learning achievement of different subjects

Activity

- 1 Explain the implications for teacher education at both pre-service and in-service level programmes
2. What is content enrichment programme? What are the content areas in Mathematics which need enrichment for primary teachers?

Let us sum up

If the primary teachers are made aware of the above aspects of evaluation, there is no doubt that the evaluation system in our schools can be improved which in turn will help in improving the learning achievement of the students. The schools which carry out improved evaluation practices may really prove to be effective schools. The effective schools need to be strengthened to bring about improvement in the quality of education. It is certain that if evaluation is employed sincerely as a tool for quality improvement, undoubtedly, the excellence in performance of students would be captured systematically. If there are any weaknesses in the learning that can be plugged immediately by providing interventions at the right time to improve the learning deficiency. Thus evaluation will be touchstone for the quality of education.

Suggested Reading

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Perspectives of ICT in Teacher Education

Utpal Mallik

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Many industrialised nations are moving from an industrial economy in which wealth is created by manufacturing goods to the knowledge economy in which wealth is created by the development of information goods and services. Those who fail to take part in this information revolution are likely to fall further behind. People, of course, cannot live on information alone, but information is key to competitive advantage both for business and modern states.

In order to cope with global shift towards knowledge-based economy fed and fashioned by information and communication technology (ICT), each nation needs to empower its citizens with the ability to communicate and access information, freely and without barrier. This would lead to establishment of societies where all sectors – public, private, education, health, individual citizens and communities can interact with seamless ease. ICT is crucial to achieving such societies. This is the strong argument in favour of information literacy, which is a process that combines information collection, analysis and management skills with the ability to use information technology in support of those skills. The knowledge economy can thrive only in an information society, in which people interact with technology as an important part of life and exchange information on a global scale. In most countries, the policies for the advancement of the information society are underpinned by the process of development of human resources capable of using these tools. The teacher has a major role in this process.

The process of information literacy requires not only the learning of a set of skills, but also a new way of thinking. Digital storage and sharing of information has increased the availability of information. The knowledge of how to access information competently, how to evaluate information as to its accuracy and pertinence and how to use it while communicating effectively requires focus.

The knowledge economy demands a competency that links information literacy skills at various levels of sophistication. Information literacy includes the

ability to access, evaluate and use information from a variety of sources. As young learners prepare for the 21st century, traditional instruction in reading, writing and mathematics needs to be coupled with practice in communication, critical thinking and problem-solving skills¹.

The dynamic process of change from industrial to information age promises fundamental changes in all aspects of life, including knowledge dissemination, social interaction, economic and business practices, media, education, health, leisure and entertainment. That is why it is important to develop capable human resources and to make the best use of the ICT². The questions of education, schooling and teacher preparation should therefore be re-examined. In this age of change, one thing is certain: teachers will need to adapt to change.

What will be the long-term impact of the introduction of ICT in the classroom? What kind of skills teachers need to acquire in order to be effective in an ICT-based learning environment? These questions have been addressed in this paper. It also presents a global perspective and presents experiences of a number of countries to illustrate the range of teacher preparation programmes and ICT practices in the classroom and the expected competencies that the teacher needs to be equipped with to cope with the changes towards information society. Finally, the paper focuses on some common dilemmas and misunderstandings associated with the perceptions of the place of ICT in teacher education.

I. What ICT brings to the school classroom!

What ICT brings to the classroom is not just the ability to handle a set of tools; tools are a means, not an end. It is predicted that as ICT proliferates in the classroom, there will be many benefits for both the learner and the teacher, including the shared learning resources, better access to information, promotion of collaborative learning and radical new ways of teaching. ICT will require modifications of the role of the teacher, who in addition to classroom teaching will have other skills and responsibilities³.

The concept of shared resources and the notion of collaborative learning may be an alien idea today for most teachers anywhere. The question of the extent to which teachers relinquish control and let learners drive their own learning create a great barrier to the adoption of ICT in the classroom. But things are changing

Ia. Shared learning resources: Infrastructure facilities of a school can be shared with the community and with children of schools that do not have necessary facilities. This practice has been adopted in a number of States in India.

Networked computing facilities create a distributed environment where learners can share workspaces and communicate with each other and their teachers. Using their shared systems, pupils develop transferable skills such as literary construction, keyboard techniques and written communication skills. Children everywhere are mastering the ability to communicate effectively using the new technologies.

Ib. Promotion of collaborative learning: Much of what we now see as individual learning will change to become collaborative learning with the spread of the technology in schools^{iv}. Reasoning and intellectual development is embedded in the familiar social situations of everyday life, so the social context of learning has a great deal of importance. Collaborative learning is therefore assuming an increasing role in the school curricula in many countries where schools' ICT experiences are old and intimate. Increasing number of schools in Australia, the UK and the USA are using discussion groups and other forms of computer mediated communication to promote collaboration in a variety of learning tasks and group projects.

Ic. Move towards autonomous learning: The power that the technology brings to the student to access, manipulate, modify, store and retrieve information promotes greater autonomy in learning. This enables learners exert more choice over how they approach study, requiring less direction from teachers. Students are going to be able to direct their own studies to a great extent, with the teacher acting as the guide and moderator^v.

II. ICT in Schools: What seems to be happening!

Ila. Technology standards for students are being established in different countries. But reliable assessment mechanisms are not developed nor implemented. In India, the National Curriculum Framework for School Education (2000)^{vi} outlines the possible role that teacher is expected to assume as the technology makes its ever-growing presence in the schools felt. Following publication of the Framework, the technology standards for the teacher and those for the secondary school children have been identified and adopted by different States^{vii}. But there is no authentic information as to how and whether the standard is achieved by teachers. Thirty-six States in the USA have established student standards for technology and nine other states are developing such standards. Of those 36 States, 22 have integrated them into their overall standards for the basic academic areas; six States have established standards for technology that are separate from the basic academic areas. Many States have only recently established these standards; only a few are fully assessing them. The trend is not different in most countries.

Iib. Schools are beginning to use learning technology, but use it to automate learning rather than to bring students unique learning opportunities never before possible. It is at the periphery of the high school curriculum where the newer and more creative uses of computers are being found, rather than in connection with academic subjects.

Iic. Teachers are getting trained, but the training often does not relate to teaching and learning, teachers learn about the technology. In ICT training programmes in most countries, teachers are being asked to learn new methods of teaching, while at the same time they are facing the greater challenges of rapidly increasing technological changes and greater diversity in the classroom, yet relatively few teachers feel well prepared to integrate educational technology into classroom instruction^{viii}.

IId. Significant funds are being invested in schools, yet a digital divide based on geographical, demographic and other factors exists between schools Technology access among schools is disparate in many Asian countries. With a million schools, India has the most well equipped schools on the one hand and schools without computers on the other. In the USA, more than \$5 billion is invested annually in learning technology, representing Federal, State, and local funds. Yet National Centre for Education Statistics says that from 1994 through 1998, schools with low numbers of minority students were three times more likely to have Internet access in classroom settings than schools with high numbers of minority students. Similarly, high-income schools were twice as likely to have Internet access in classroom as low-income schools. The digital divide, even in affluent countries, is not going away

Ile. Schools are getting wired, but in many cases the connections are not yet robust or high-speed. The number of schools connected to the Internet is increasing the world over, yet most classrooms still do not have access to the Internet. Those who have, are managing with poor access

III. Engineering the new role for the teacher

With those changes taking place in some countries, and showing signs of spreading to others, the teacher's role requires re-engineering. But teachers the world over are polarised. While some have enthusiastically integrated the technology into their classroom, some are frightened by ICT and some others have simply rejected the idea, in spite of adequate infrastructure support available. The cynicism is somewhat justifiable, based on previous experience of computer-based applications such as computer-assisted learning programs (CAL) of indifferent value. Some earlier enthusiasts have inadvertently damaged the reputation of ICT by poor classroom practice or failing to think through the issues before implementing the technology^x

Here are four key reasons why the role of the teacher has to change with spread of ICT in schools.

The obvious, and somewhat mundane reason for the change is that ICT will cause certain teaching resources to become obsolete and new resources commonplace. The ability to use CAL and hold interactive sessions with children before and after they have used a CAL program or guide learners through the World Wide Web are minimum abilities expected of teachers.

ICT may also make some assessment methods redundant. In an ICT environment, on-line tests can be used which instantly provide the teacher with a wide range of information associated with the learner's score. Comparisons of previous scores and dates of assessment, for example, will indicate a child's progress. This requires some ICT competence on the part of the teacher.

It is no longer sufficient for teachers to impart content knowledge. It will be crucial for them to promote information literacy and nurture collaborative working practices, which are important skills in today's context. The Internet gives access to an exponentially growing storehouse of information sources, almost unlimited network of people and computers and unprecedented learning and research opportunities. It provides opportunities for inquiry-based learning where teachers and students are able to access some of the world's largest information archives. The borderless provision of education is upon us. Teachers can share teaching strategies and resources with other teachers and educators through communication through the Internet. Identification, classification and authentication of electronic information sources will be critical new tasks for teachers. That is what collaborative learning is all about.

Teachers are required to reappraise the methods by which they meet children's learning needs and match curricula to the requirements of human thought. The Internet offers an excellent medium for that. Traditional methods of imparting knowledge are characterised by a linear progression of information. Human minds are more adaptable

than this, using non-linear strategies for problem solving, representation and the storage and retrieval of information. Habits of linear thinking, of information gathering, of resource production and of the structuring of learning environments will face adjustment as the computer increasingly becomes used as a curriculum tool and as a tutor to facilitate student learning. Hypertext software provides students with non-linear means to match non-linear human thinking process`

IV. Teacher Development: the global scenario

The policies on ICT and schooling are eloquent about ICT being a key area in teacher preparation. However, these policies and goals do not guarantee adequate resources to, changes in and approaches to teacher education. Many teacher-trainees acquire ICT skills outside their education courses. There is a common notion that these skills are enough for teaching and learning with ICT. In most teacher training courses, ICT is taken as one of the subjects, an add-on to the course, for acquiring some generic skills. This leads to the assumption that ICT in education is about new ways to package and transmit *content* – as distinct from encouraging the *process* of learning, which calls for adoption of applied and pedagogical approaches to ICT. Such courses should more effectively develop a generic as well as across-the-curriculum focus on teaching and learning with ICT both as a medium and a set of practical skills.

In actual practice, most countries, including some affluent ones, are far behind the desired marks. What are the present trends of ICT use in teacher education? What schools are doing with the technology? These and related questions are to be answered and the dilemmas of ICT in teacher education understood by the community of educators and educational policymakers. That would help identify the kind of skills that teachers need to acquire in order to be effective in an ICT based learning environment.

School teachers constitute the largest group that has a legitimate demand for staff development opportunities because teachers, by and large, have no formal

qualifications in ICT. The priorities in this area reflect the national goals in ICT implementation in schools"

In some Asian countries, like China Hong Kong and Chinese Taipei, there is a stress on development of teachers' general technological skills in using ICT and their abilities to create multimedia courseware materials. In India, Intel's Teach to the Future programme, one of many teacher development programmes adopted by some school systems, stresses on the development of the ability of teachers to develop lesson plans and prepare multimedia frames to present those lessons before the class

In China Hong Kong, 90% schools had staff development in the use of ICT as a school policy. But most of the courses were of general introductory kind that focused on common office applications and the use of the Internet. In 30-40% schools, teachers took advanced courses related to pedagogical practices. By 2001, most teachers had some form of training and basic level ICT competency. Integration of this competency into pedagogy was limited to the teachers' ability to use multimedia presentation tools and expository teaching.

The pre-service courses for teachers in Chinese Taipei include 30 credits of selected computer courses and one-year internship. In-service courses are specially designed for integration of ICT into the curriculum. The Ministry of Education (MOE) considers these courses as an essential component of in-service programmes for it subscribes to the idea that computer skills are to be learnt by teachers to enhance their teaching. The in-service teacher is therefore required to pass one or more ICT tests within a specified period.

In countries where ICT infrastructure is relatively low, as in some Eastern European countries, the focus of teacher development programmes is on basic technical skills. In the Czech Republic, the first in-service training of teachers started in 2000. In 2001, the pre-service courses for teachers included computer-aided education. The national aim is to have all Czech teachers ICT literate by 2003. The policy statement

acknowledges that integration of ICT into instruction will be a long process. Slovenia is slowly waking up to the possibilities that the use of ICT in curriculum opens up. In the Russian Federation, there is a distinct “two culture” phenomenon that separates informatics teachers and subject teachers in the school. The former has a strong orientation towards ICT skills. However, multiple approaches recently adopted for in-service training through UNESCO Institute for IT in Education (in Moscow), Intel’s Teach to the Future programme, etc. is slowly drawing subject teachers towards technology application in the pedagogical process.

In schools systems where there is longer tradition of ICT use across the curriculum, or at least of instructional use of computers, the professional development programmes focus more on links between ICT use and classroom practices. A 1997 survey in Australian schools showed that 95% of teachers had basic skills to use computers but a considerable number of teachers lacked common application skills (e.g. 24% did not know how to use the Web; more than 30% could not e-mail). Ever since, efforts have been made to align staff development programmes to classroom practices.

The Government of Denmark has granted an enormous amount of fund for in-service training to ensure that teachers explore possibilities of ICT as an educational tool. But very few courses deal with the pedagogical use of the technology. In recent years, a number of initiatives have been taken to reverse this trend. Finland locates its in-service training programme for teachers within a nationwide Information Society Strategy and developing the knowledge and skills needed to reform pedagogical practices, ‘especially with regard to collaborative teaching and learning, networking and team work’. This is a proactive strategy in anticipation that ‘the Information Society, the genesis of a global economy and the development of the media require substantial changes to the culture of work and professional competence’ and that professional development for teachers is organised within this broader context. France has successfully integrated ICT into the teaching process. There are indications that the teachers’ role has changed accordingly. German schools practice the technology to enrich the teaching-learning in schools.

Integrating the technology into learning has been high on the agenda of Malaysia since 1989 when the Computer Integrated Learning System project was launched to enable teachers develop computer courseware. School syllabi for all subjects require that ICT be used extensively in teacher training programmes so they can use the technology in their teaching.

The UK has a long tradition, since the late nineteen seventies, of using the technology with an emphasis on its role in enhancing the teaching-learning process. Of late, the development of modern, knowledge-driven economy in the UK has been linked to the creation of a knowledge society in which learning, teaching and re-skilling of teachers are expected to make full use of ICT.

Policy statements in some countries recognise the importance of using the technology for pedagogical purposes, but acknowledge that implementation of the policy would be a difficult and/or time-consuming process. In spite of adequate infrastructure, compute-driven lessons are not widely practiced in schools in the Netherlands.

Teachers in the USA have more experience than teachers elsewhere of using ICT in teaching but the nature of technology-curriculum integration widely varies. The National Science Foundation-sponsored hardware and software development project has enhanced the scope of integration. Thirty-eight out of 50 States require computer training as a pre-condition for teacher certification. It is recommended that colleges of education should focus on supporting instructions with technology in their teacher preparatory courses^{xiii}.

Models for staff development vary across the countries. In China Hong Kong and Japan, there are centralised training provisions. China Hong Kong, Chinese Taipei and Singapore, have set timelines for teachers to reach the required levels of competence and requirements on the minimum percentage of class teaching time as an implementation target for computer use. On the other hand, in New Zealand, schools produce their own professional development plan to bid the funds. In Asia, it is basically face-to-face training courses in some designated venues. Alternatively,

training personnel are sent to schools to conduct in-house training (e.g. Japan). Some systems where population is distributed and the Internet connectivity reasonably good, the use of on-line courses are on the rise. Australia, Spain and some of the European countries have such provision. In India, the Indira Gandhi National Open University conducts such on-line courses for tertiary level teachers. The National Council of Educational Research and Training (NCERT), New Delhi is poised to launch similar courses for secondary school teachers countrywide.

In Singapore, sixty experienced teachers act as senior IT instructors or coaches for 24,000 strong teaching workforce. They help teachers incorporate technology mediated learning strategies. This is an on-site training approach. Schools don't think the programmes have been thrust upon them; they own the programme.

A notable development is increasing involvement of organisations working on school education to promote change in education practices as part of professional development process. In these organisations (as in South Australia), the professional development programmes focus on developing communities through which teachers share ideas with one another, acting as a platform for generating new teacher expertise.

Today's students live in a global, knowledge-based age. They deserve to have teachers whose practice incorporates the best that the technology can bring to learning. But the common trends in the ICT use in the pre-service education of teachers as documented in a number of countries are not exactly encouraging. First, there is glaring inconsistency between the technology awareness among the teacher training faculty and what they are training teachers to do in their classrooms. Secondly, the pre-service teachers do not have the chance to practice or model effective technology use in their own classrooms. Thirdly, ICT training is not adequate or effectively designed. Finally, even where ICT infrastructure is available in the field training, student teachers do not routinely use the technology during their field experience.

V. Teacher Standards for Competency in ICT

The competencies expected of all schoolteachers are based on *Information Technology in Schools: Curriculum Guide and Syllabus* (NCERT 2001) (See reference number 7) and on an on-line paper from the Ministerial Advisory Council on the Quality of Teaching in Australia^{xiii}. There is a broad agreement between the two documents.

By now it is well understood that the major challenges to the integration of technology in the classroom is not the computing skill, but the pedagogical implications, the impact on the structure and content of curriculum, classroom organisation and practice and the changed role of the teacher. Basic computing skills are short-term needs, but these major challenges will need to be addressed to some degree at every level of the teaching and administrative hierarchy. In many societies where children take public examination at the terminal school stage, the potential of technology to impact on examination and management structures, both within schools and systems will require attitudinal adjustments.

The attitude with which teachers and students approach computer enhanced learning is also a major factor in the use of technology in the classroom and in administration. An understanding of legal and ethical issues associated with information and other technologies will become a key requirement of teachers and administrators.

These skills are allied to other information skills, such as the ability to locate information, to select appropriate applications and software, to organise material sequentially, to assess the relevance of information and to present it appropriately. Associated with all these is the understanding by the user of what the technology is able to achieve and how it can enhance student understanding.

While basic skills may suffice for the moment, educational administrators need to be aware, as far as is possible, of the future directions of technology, and to include these in initial teacher education courses and in professional development courses.

Va. The basic competencies expected of teachers may include their ability to:

- Demonstrate sound understanding of basic ICT concepts and operations
- Understand the role of technology in change and the implications of technology-mediated changes for education
- Plan and design effective learning environment with the necessary technology support
- Create interest in learning among students through unique utilities like the Internet, tool software and multimedia programs of various kinds, including game programs
- Make the best use of technology-enhanced lessons to enrich student learning
- Adopt assessment strategies to evaluate (a) student competencies in ICT-skills and (b) student learning in the new environment
- Show awareness of overall developments in communication and information technology and of the potential these have for student learning
- Use technology to enhance own creativity and professional practices
- Demonstrate understanding of social, ethical, legal and human issues surrounding the use of technology in the school
- Fashion a climate of values that encourages questioning exploration, problem-solving, decision-making and group cooperation
- Strive for education to emerge from its disciplinary narrowness

Vb. The ability to identify useful learning materials from various sources is yet another important skill for the teacher. He/she has to take an active part in developing his/her own checklist for evaluation of learning materials and use it in the context of the:

- learner profile
- learning environment and
- technical strength of the ICT facilities available in the school

While the ability to produce, or to facilitate the production by students, of resource materials is important, the teacher needs to be equipped to use integrated software packages and commercial applications. This will involve:

- the ability to select and evaluate technology-based learning materials
and

- the ability to determine underlying pedagogical assumptions, gender and ethnic bias, educational relevance, social impact and suitability for the classroom environment, for cooperative learning and for peer interaction

Vc. of particular importance for teachers is the ability to:

- generate lesson plans
- match computer applications to specific curriculum content and processes
- evaluate computer software for educational purposes
- structure subject programs and lessons to incorporate useful and appropriate computer activities
- evaluate student learning from computer-based activities

Vd. Pedagogical Issues

The key issue for computer proficiency is pedagogical, not technical. While basic skills will assist teachers to advise and supervise students, the most important competency associated with computers is the ability to organise student-centred learning.

As research indicates, there is a need for classrooms to become more student-centred. Teachers can use the potential of computers to focus on student learning. The successful integration of computers into the classroom will depend on the ability of teachers to structure the learning environment in non-traditional ways, to develop socially active classrooms, encouraging cooperative interaction, collaborative learning and habits of group work in students. The role of teachers in such classrooms will become that of guides, facilitators and learners, as teachers receive instruction, assistance and guidance from students. Classroom management skills will need to be developed, as student-teacher interaction becomes more student-centred, and as students are encouraged to view their teacher as co-learner, losing centrality in the teaching-learning process. "The teacher's role will be different if he is using technology correctly".

The key skills of the future will include the ability to develop innovative ways of using technology to enhance the learning environment and to encourage creativity and

research. Computers can be used as integrating tools in helping students engage with concepts and ideas across the curriculum. Such a pedagogical shift is likely to have considerable impact on assessment procedures in schools. The ability to construct appropriate tasks and "examinations" in such a learning environment will be a key proficiency with which teachers will need to be equipped. Such pedagogical flexibility will need to be developed in the pre-service teacher trainee through compulsory core courses in teacher education programs; current optional or low priority courses will not provide teachers with the range of competencies required. Important elements of this will include

- an understanding of how computer technology can enhance student learning and help learners explore their world
- the creation of self-regulating learning environment
- the management of classroom environment and school resources
- the ability to use computers for student profiling and reporting, lesson preparation and class/faculty administration

Ve. Values and Ethics

Equally important as competence in the use of appropriate current technologies is the development of critical and discerning attitudes and values related to computers and their applications. Teachers require the capacity to be open to new ideas and technologies, to evaluate each new advance to determine if and how it can enhance the learning of students and to be confident of their own ability to use these new technologies.

Teachers must also be aware of the impact of these developments on society in general, on the nature of work, on personal interactions and other important ethical issues relating to classroom use of any technology and be aware of the legal aspects involved.

Education in schools is an activity concerned with the growth towards maturity of each individual student and at the same time concerned with students' wider social development. Computer environments can make ideas more accessible and assist students to become independent learners. Issues of gender equity and social equity, of

fair access and responsible use need to be part of both the pre-service teacher trainees and the practicing professional's awareness

The teacher with such competencies needs also to develop attitudes of tolerance and patience to work cooperatively in a professional environment with colleagues who have a range of attitudes and skills. Key proficiencies will include

- recognising plagiarism
- understanding the issues of copyright, of censorship and of privacy.
- recognising the issues of appropriate access to and verification of information gained from such sources as the Internet
- interpersonal skills for working in environments where colleagues have a wide range of abilities in using the new technologies

VI. Integrating ICT in education: Common dilemmas

ICT in education tends to be approached as an add-on rather than an effectively integrated component. An integrated approach serves to provide a focus for reconciling a range of oppositions and their associated dilemmas for educators – for instance, theory vs practice, competency vs higher-order learning, formative vs summative assessment, teacher-centred vs student-centred learning.

Likewise, an integrated approach presents a process of grounding skill or information acquisition in an initial practical context and extending this as applied and innovative knowledge in practice. Hands-on practice is needed as a basis for developing applied approaches and innovative practices in education, which go beyond the mere transmission of 'content', or skills in a vacuum. In other words, effective contexts of learning with ICT are needed to encourage students to bridge the gap between 'thinking' and 'doing'. Many teachers around the world are disappointed by the latest cutting edge technology as they expect that one day the *perfect technology will come along and integrate IT in education for them.*

VIa. Teacher education in ICT foundation subjects: Typical dilemmas^{xiv}

What is wanted is an integrated approach to ICT foundation course design. If trainees in any large ICT teacher foundation course are going to walk away at the

end with the skills, attitudes and knowledge to effectively integrate ICT in their own practices, then they require an appropriate learning context and framework.

- Teacher designs the ICT-supported learning environments, this sets an effective context for learning
- A hands-on approach to active learning with ICT results in grounding learning and thinking in 'doing'
- An 'across-the-curriculum' integration of ICT ensures that ICT is not taken as just tools, but a mode of learning which needs to be integrated across-the-curriculum
- Appropriate support and access issues, like awareness of needs, fears and potentials of learner require serious attention.
- Applied and not just skills-based ICT standards learnt in context of application become powerful techniques and possibilities
- Other elements and requirements related to overall course design include
- A balance between process objectives and specific learning objectives
Process objectives represent 'deep learning' strategies for transforming 'content' into applied/innovative performance.
- Grounding the learning process with ICT in assessment The tools of ICT lend themselves to assessment strategies, frameworks and repositories which encourage as well as gauge the process of learning in any subject or discipline
- Connecting competent and higher-order modes of active student learning with ICT Effective learning needs to be grounded in practice to achieve applied and innovative knowledge Effective use of ICT learning tools encourages this.
- Reconciling pedagogical and technological principles for ICT-supported learning environments. Educational implications of information access and communication, pedagogy and technology should converge and complement around a common strategy of interactive learning

Finally, an integrated approach can resolve the following dilemmas faced by teachers and coordinators attempting to promote effective ICT integration in education"

- **Short-term versus long-term dilemma:** The extra efforts required to integrate ICT more effectively now will make life easier for teachers in the long run
- **Evolution versus revolution dilemma:** Whilst the transition to an integrated approach can be gradual in terms of the specific details, it does perhaps require a 'jump' or 'shift' in approach
- **Easy path versus professional commitment dilemma:** Why would teachers volunteer the extra time or effort needed to integrate ICT effectively if this is not sufficiently recognized, encouraged or rewarded?
- **Self-interest versus student interest dilemma:** Some teachers might be prepared to volunteer to go the extra mile, but how can others be expected to do the same?
- **Abstract versus applied learning dilemma:** Effective ICT integration in foundation courses or introductory contexts actually often requires more hands-on practice and face-to-face interaction

VIb. Learning versus assessment dilemma: The use of program and activity templates (especially if fixed rather than open-ended) can be counter-productive if they serve to avoid rather than promote the 'process' of learning

- **Theory versus practice dilemma:** Course theory, content/information and even skills acquisition need to be grounded in applied practice and process
- **Student centred versus teacher-centred dilemma:** Unless grounded in practice, student-centred methods and theories may reinforce the hierarchical models of learning which they are supposed to be an alternative to. In any case, teachers remain the crucial factor in the effective construction of learning environments and activities as well as modelling of knowledge
- **Ad hoc versus integrated dilemma:** The add-on use of some new method or tool will not be sufficient by itself to achieve an integrated framework –indeed may serve as a distraction and obstacle.

The end result of staff development programmes is about teachers modelling flexible, adaptable and transferable attitudes about the use of ICT in education and

facilitating children's learning across the curriculum. For the system to work in this changing scenario, strategic rather than *ad hoc* consideration should be given to the relation between *resources, curriculum and pedagogy*, and *learning and assessment*.

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ⁱⁱⁱ Wheeler, Steve. (2000). The role of the teacher in the use of ICT. Keynote speech delivered to the National Czech Teachers Conference at University of Western Bohemia, Czech Republic.

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^{vii} *Information Technology in Schools: Curriculum Guide and Syllabus* (2001). NCERT, India.

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^{xi} Law, Nancy and Plomp, Tjeerd. (2003). *Curriculum and staff development for ICT in education* in *Cross-national Information and Communication Technology Policies and Practices in Education*, Editors Tjeerd Plomp *et al.* pp. 15-30. Information Age Publishing Inc.

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Teacher Commitment

K. Walia

Teacher Commitment

K Walia

Introduction

India has a glorious tradition of education, teaching and learning. The ancient system resulted in rich scriptures and literature which are being studied and analysed world over even today. Any analysis would indicate that this was possible only due to exemplary levels of commitment, devotion and dedication of the teacher. The teacher not only gave specified knowledge but also looked after the all-round growth, development and nurturance of the young learners under his charge. The teacher was the 'learned one' and only the learned ones were accepted as teachers by the society. They continuously grew in scholarship, experience, knowledge and wisdom. They lived a value based life and commanded respect. The relationship between teacher, school and community ensured high quality education. Teachers identified their responsibilities very clearly and put them to practice in their life. They became the guides and mentors of the community and role model for everyone. Anyone functioning with such high perceptions and support systems would succeed only when commitment to the cause takes precedence over everything else.

Over the centuries traditional Indian System of education has undergone several changes of considerable magnitude. However commitment as a value is still visible amongst majority of teachers working in Indian schools, although there has been a decline in the levels of commitment. Any decline in the level of commitment in teachers can have serious implications on the education system, in general and students performance in particular. It will obviously have implications for the future of the nation as well. The world needs not only professionally competent teachers but also committed teachers who are caring, affectionate, understanding and help students in their all round development, who are in close contact with the community and society, know the context in which they are functioning and identify their roles accordingly. When a teacher is competent and committed it results into optimum performance of the teacher that brings out the best in the body, mind and spirit of the learner. Let us have a look at some of the characteristics of a committed and not so committed teacher.

Committed	Not committed
<ul style="list-style-type: none"> • Considers teaching a mission • Humility • Guide • Caring • Active • Mindful • Patient • Devotes time to the learner outside the classroom and outside the school • Life-long learner • Committed to society, Institution nation • Flexible • Hard working • Optimistic • Commands respect • Supportive 	<ul style="list-style-type: none"> • Considers teaching only a Vocation • Arrogance • Preacher • Callous • Re-active • Unmindful • Impatient • Devotes time to the learner only inside the classroom • One-time learner • Committed to self • Rigid • Easy going • Pessimistic • Demands respect • Unsupportive

Research findings show that teachers who are not committed could cause low achievements and higher absenteeism among students. Everyone comes across committed and not so committed teachers. The characteristics could be easily delineated. Efforts must be made to sensitize, motivate and persuade every teacher to join the category of committed teachers. When it comes to transaction of curriculum, a committed teacher acts as a motivator, facilitator, learner demonstrator, innovator, discoverer, inventor etc.

Objectives

After reading this module the learner would

- Understand the context and concept of commitment amongst teachers
- Appreciate its importance

- Identify areas of commitment .
- Understand the interlink between competency areas and performance areas.
- Internalize the need for achieving high levels of competence and performance through commitment
- Undergo attitudinal change

Context

There are several ways to perceive a committed teacher. Without getting into the technicalities one could identify a committed teacher on three broad parameters

- Capacity and competence to understand learning needs of the students, also other needs which influence the process of learning and acquisition of knowledge and his/her overall growth and development The teacher has also to understand the needs and aspirations of other people like parents and the community
- Willingness to act and to fulfil the identified needs. Primarily, the teacher has to act to respond to the learning needs as mere identification of these would serve no purpose. This requires a sense of commitment and willingness to work for others with a sense of responsibility
- Modesty is one of the essential prerequisites which is a consequence of proper evolution of the affective domain of the individual It is this aspect which leads to higher levels of performance. Even most of the learned teachers with all their qualifications will not meet the expectations of the society if their performance does not result in higher levels of learning practically for all the students which depends upon developing commitment and performance in areas like understanding the learners needs and always being modest and humble. Fig. 1 represents this graphically.

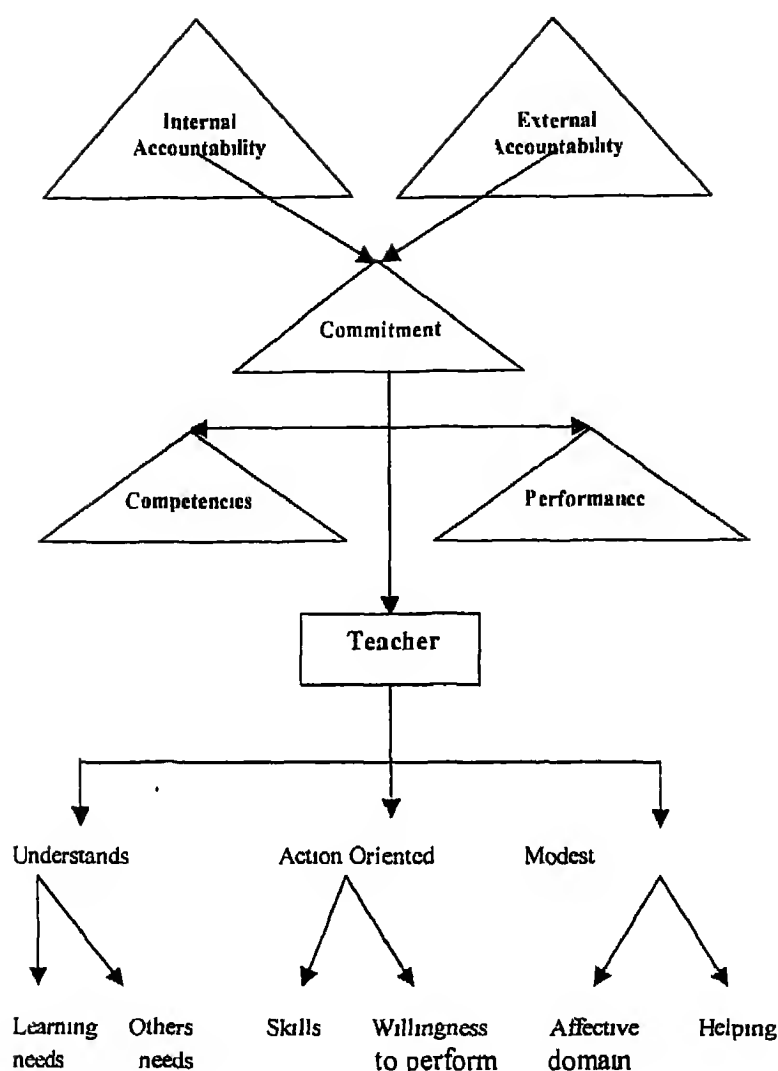


Fig. 1

In teacher education programmes, commitment has generally been presumed to be omnipresent. Unfortunately the same has got relegated to the background and efforts to generate motivation, commitment and devotion often do not receive adequate emphasis during teacher education. The policies and programmes of teacher education need to give this aspect its due place. It has to become an integral part of each and every programme of teacher education. This requires a change of mind-set and a fresh look on the totality of teacher education programmes at pre service as well as in service programmes. Teachers capacity for tolerance, acceptance, humility and modesty could endear them to the pupils, community and parents. He/she has to acquire the necessary skills to enable him/her to

understand the learning needs of the students. Such acquisition would help every teacher to perform better and function as role models before their learners.

Commitment can be broadly classified into five areas i.e. commitment to the learner, profession, institution, society, values as shown in Fig 2. Unless and until a teacher is competent and committed then only he/she will perform to an optimum level.

Commitment Areas

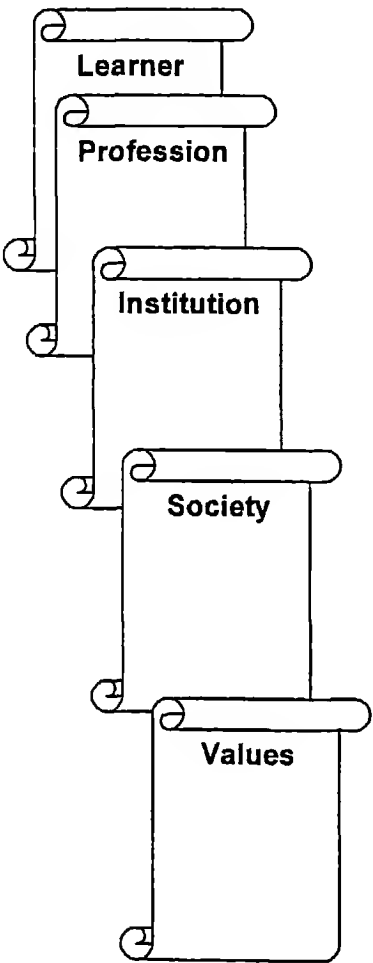


Fig. 2

Commitment to the Learner

The success of a teacher depends on his/her ability to make students learn and develop. Learning is an attitude which starts taking shape at the early stage and remains throughout life. This can be made possible only when the learner experiences learning as joyful and rewarding. Commitment to the learner implies teachers genuine love and affection for students coupled with their pedagogically correct interpretations, commitment to their human empowerment and care for the development of quality of life among the children. These commitments will, indeed, add to the effectiveness of every teacher's role performance.

Teachers must do self analysis of their behaviour as it is an important tool for commitment building. They must know about the negative impact of even a minimal presence of their intolerance and aggressiveness on the growth and development of students. Commitment to the learner is crucial for teachers in making teaching- learning effective and thus needs to be inculcated in the student teachers through teacher education programmes.

Activity 1

List out five attributes which put you in the category of a teacher committed to the learner.

Activity 2

Identify two actions of your colleagues who are committed to the learner.

Activity 3

Please tick mark in the appropriate box.

- | | | |
|---|---------------------------------|--------------------------------|
| ➤ Do I recognize each learner by name? | Yes
<input type="checkbox"/> | No
<input type="checkbox"/> |
| ➤ Am I aware of the learners home situation
his/her background ? | <input type="checkbox"/> | <input type="checkbox"/> |

- | | | |
|---|--------------------------|--------------------------|
| ➤ Do I make learning participatory and a gratifying/rewarding experience for the learners ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ➤ Do I make efforts for the wholesome and all round development of the learners ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ➤ Am I giving time to the learners outside the classroom and outside the institution ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ➤ Do I make self-analysis of my teaching method and behaviour and try to get feedback from the learners so as to improve myself ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ➤ Do I evaluate the students from the point of view of remedial teaching ? | <input type="checkbox"/> | <input type="checkbox"/> |

Commitment to the Profession

Commitment to the profession involves pride in one's being in the teaching profession and a strong desire for professional development. However, with the expansion of educational facilities in the country, many of the teachers join this profession not because of any kind of inner compulsion or love for the profession but due to other constraints. In the earlier decades teachers were given high status and were most respected but the situation has gradually changed. One must analyse the causes for this deterioration and try to regain the status and this can happen only if teachers are committed. It is essential that teachers take pride in their profession and consider it as one of the noblest profession and work with a missionary zeal. They must keep upgrading and enhancing their knowledge and skills Teachers have to continuously strive for becoming better and better each day and attain excellence in the profession.

During and even after school hours, a committed teacher's mind remains always occupied with thoughts of students, their growth, individually as well as collectively, and improvement of their performance. Committed teachers also work hard for their own

professional growth to contribute their best to the profession as teachers. They observe professional ethics befitting the nobility of the profession.

Activity 1

List out five activities which may have made you more committed to the profession

Activity 2

Please tick mark in the appropriate box.

	Yes	No
➤ Do I regret being in the teaching profession ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I take classes regularly and on time ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I adhere to professional ethics ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Am I upgrading my knowledge and skills ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Am I contributing frequently by writing for journals, books etc?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I consider teaching as a mission ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Have I a good rapport with my colleagues ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Am I visiting the library frequently ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I use multiple teaching aids in the classroom ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I have the desire to be well known in my profession ?	<input type="checkbox"/>	<input type="checkbox"/>

Commitment to the Institution

Every institution gradually develops an image of its own. Every teacher must try to build good image to his/her institution, enhance its credibility and ensure greater acceptability of it, by the parents and community. This creates lasting bonds between the institution and its learners and subsequently between institution and its alumni. All this is possible when the teacher strives hard to enhance the image of the institution. Teachers commitment to the institution where he/she is working is vital. Teachers commitment to the learners and profession will not be sufficient unless and until the teacher is committed in totality to his/her own institution. He/she must be proud of her/his workplace and consider it as one of the best. Every teacher must be occupied by ideas as to how to make her/his institution better if not the best. Teachers need to play an active role in solving the problems of the institution which could be pertaining to infrastructure, management, finance, administration etc.

Activity 1

Identify five activities and programmes which give you a sense of oneness with your institution. Also discuss why?

Activity 2

Please tick mark in the appropriate box.

	Yes	No
➤ Am I loyal to my institution?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Am I Co-operative with the Head of the institution?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Am I proud of my institution ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I work hard for my institution ?	<input type="checkbox"/>	<input type="checkbox"/>

- | | | |
|---|--------------------------|--------------------------|
| ➤ Do I prepare to continue working in my Institution even though there are better gains elsewhere ? | <input type="checkbox"/> | <input type="checkbox"/> |
| ➤ Do I ever regret being in the institution ? | <input type="checkbox"/> | <input type="checkbox"/> |

Commitment to the Society

Teachers commitment is needed not only towards the learner, profession and institution but also towards the society. They must understand the community and be actively engaged in helping and solving their problems whenever possible. Teachers need to continuously convince parents and the community for enrolling and retaining their children in schools. They must realize the importance of building strong links between the institution and the community. The teacher must be capable of identifying and utilizing resources from the community and also help the community in using the school resources. Active participation in campaigns like child labor, dowry, drug addiction, health, environment protection, care for the aged etc. is essential. Teachers enhanced knowledge skills and attitudes will lead to increased productivity to improve the quality of life of the whole community. Teachers would be honoured if they prove themselves to be philosophers, guides and friends of the community. Commitment of the teachers to the local community could gradually extend to the whole society. Since teachers are considered to be nation builders, it is extremely important for teacher education to develop this commitment in the teachers as well as teacher educators to help them contribute constructively and meaningfully for wholesome development of the society.

Activity 1

List out five attributes that have made you more committed to the society in the recent past.

Activity 2

Please tick in the appropriate box.

➤ Do I realize that I am accountable to the society?	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I take initiatives in building strong links between the institution and the society ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Have I tried to understand the problems of the society?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I make an effort in solving the problems of the Society ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Have I at any time acted as a guide and philosopher to the society?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I actively participate in campaigns like child labour, drug addition, plantation, environmental degradation ?	<input type="checkbox"/>	<input type="checkbox"/>

Commitment to Values

Teachers' commitment to basic values is vital specially in the context of crises of values in the present day. Teachers have to play a pivotal role in not only inculcating values in the students but also internalizing it themselves since they are role models. Teachers themselves have to adhere to basic values like truth, honesty, punctuality, peace, non-violence, love etc. as students are keen observers of the teacher. Although values may differ from one community to the other but it is certain that the community expects the teacher to lead a value based life. Observance of values by the teacher can create a great impact on the impressionable minds of the students who may unconsciously and gradually imbibe these values as an integral part of their personality. Values have to be transmitted not only while transacting the curriculum in the classroom but also through co-curricular activities – debates, dramas, biographies, stories etc. Teacher education programme must respond to values by inculcating them in the student teachers through various kinds of value building activities

Every teacher has to internalize that he/she is a teacher of values, not only within the classroom but round the clock

Activity 1

List any five values which you think you are inculcating most as a role model before the students.

Activity 2

Please tick in the appropriate box

	Yes	No
➤ Am I conscious of speaking the truth ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I make an effort to lead a value based life ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Am I concerned when I see my students not leading a value based life ?	<input type="checkbox"/>	<input type="checkbox"/>
➤ Do I get disturbed when my colleagues are not honest ?	<input type="checkbox"/>	<input type="checkbox"/>

Conclusion

Teachers have a tremendous responsibility towards the learner, profession, institution, society and to the nation. When teachers realize the significance of being committed and internalize these it can become one of the greatest asset to a teacher. Teachers who are already teaching and are uncommitted need to undergo attitudinal change through in-service programmes on teacher commitment. There is a dire need for developing not only print material on teacher commitment but also audio-visual and these need to be extensively disseminated to all the teachers and student teachers. Recognition and high incentives must be given to outstanding and devoted teachers. This could perhaps motivate the teachers who

are lacking in commitment. Teachers and teacher educators are the key elements of reshaping and reconstructing the future of the nation. Such a stupendous task can be undertaken only by teachers who are committed and work with a missionary zeal.

Suggested Readings

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**Current Perspectives, Emerging Issues and
Strategies in Primary Level Pre-service Teacher
Education**

M. A. Khader

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Current Perspectives, Emerging Issues and Strategies in Primary Level Pre-service Teacher Education

M. A. Khader

Overview

As teacher educators we often think that the practices we follow in performing our professional roles are correct. They need not be. We need to recognize the emerging theoretical positions in pedagogy and reformulate professional practices. Such an initiative would provide a frame to unfold current perspectives, emerging issues and the strategies related to teacher education programme. Teacher education is socially constructed and is influenced by the initiatives taken by the society. This module examines the perspectives, issues and strategies in primary level teacher education programme through

- national initiatives for quality
- forms of pre-service teacher training
- reframing theoretical formulations in teacher education curriculum
- restructuring field experiences
- relevance of information communication technology
- setting norms and standards
- professionalism of educators

Objective

Upon going through this module you should be able to:

- reflect and analyse the teacher education programme you practice at home, discern the new perspectives that are needed, and map out the emerging issues and the strategies to address them.

National initiatives for quality

Since fifties India has witnessed manifold expansion in the primary schooling system. It is natural for a society driven by democratic principles to reach out the schooling system to all. Well, we can see a quantum jump in the size of schools, students, teachers, and teacher training schools. Today, we have around 1300 teacher training schools and an expanding primary school system with a student size of 1136 lakh and employing around 19 lakh teachers. The picture that emerges is the story of quantitative expansion possibly to address the objectives of universalization of elementary education. However, the story takes a turn towards **quality** in mid-eighties with the onset of National Policy on Education (NPE) 1986.

Table - 1 : Size of schools, students, teachers and teacher training schools

Schools	209671 (1950-51)	626737 (1998)
Students	19200000 (1950-51)	113600000 (1999-2000)
Teachers	538000 (1950-51)	1919000 (1999-2000)
Teacher Training Schools	—	1334 (1999-2000)

Source: NCERT, compendium of Educational statistics (School Education). New Delhi, 2003, P.28, P.115, P.143, P.176.
The terms 'primary' and 'elementary' are used interchangeably in this module.

The NPE outlined a national system of education with a common educational structure, access to comparable quality of education to all based on a national curriculum framework with flexible common core components. Stress placed on Minimum Learning Reminders reminds the need for defining standards in learning, teaching and school facilities. The thrust on restructuring teacher education programmes and innovative programmes underscore the commitment to quality education. New initiatives such as Uttar Pradesh Education Project, Bihar Education Project, Andhra Pradesh Education Project, Lok Janshiksha District Primary Education Project (DPEP) and the recent effort through Sarva Shiksha Abhiyan illustrate the commitment to infuse quality at the primary level of education and teacher education. The programme of Mass Orientation of School Teachers (PMOST) in its reformulated form, SOPT, provide inputs to fine tune teachers to keep pace with the changing needs. Creation of District Institute of Education and Training (DIET), Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs) in each district for micro level planning and execution of programmes for strengthening education and teacher development is a departure from the past. Education Technology (ET) has been gaining ground in the last few years. Programmes for teachers. The National Council of Educational Research and Training (NCERT) through its Central Institute of Educational Technology (CIET) is engaged in producing audio-video programmes on subjects related to teaching and teacher training. These programmes are telecast through TV channels for the benefit of schools and teacher training institutions. Participation of NGOs in the education and training at primary level has taken a new dimension in this context. Establishment of National Council of Teacher Education (NCTE) in 1995 as a statutory authority for the regulation and proper maintenance of norms

standards in teacher education and for strengthening planned and coordinated development of teacher education system in the country was a well thought out initiative towards quality.

These initiatives paved the way for defining learning standards, initiating activity centric child centred strategies in teaching and training, and reformulating content and process of teacher training. Attention has been drawn to training mode with the increasing adoption of modular approaches and on-site training. BRCs and CRCs, under the DIET, are decentralized academic support systems formed to provide periodic training and on-site support to teachers in terms of school visits, group discussion, demonstration, feedback, material preparation, reflection on school specific problems and sharing of ideas through monthly meetings. Efforts to provide minimum facilities to primary schools including two teachers to single teacher schools, reflect the drive to move to quality. These developments obviously, advance the claim that the learner experience is strongly in the grip of an interaction paradigm which offers some form of interaction (Seshadri, 2003). These changes are quite visible in the in-service form of training. However, a discerning eye tells that the winds of change are yet to make ripples on the pre-service form of training. It is a major concern and seeks attention.

Forms of pre-service teacher training

Though there are several pre-service training schools in each state, DIETs have been set up as pace setting institutions for planning and executing teacher training programmes at the district level. They are engaged in multiple functions covering pre-service training, in-service training, curriculum and material development, planning and management, and research and extension. However, the initial teacher education is a major area of operation for building professionalism. The course offered by them are either Certificate or Diploma labeled as JBT, TTC, D.Ed. PTT, STC and so on. Though majority of the courses are of two year duration, there are states which offer one year course of study (see Seshadri, 2003, P. 206). Universities invariably shy away from entering into the area of teacher preparation at this level. However, the effort of Delhi University in conceiving, designing and operating an integrated 4 year B. Ed. course is a meaningful initiative reflecting innovation in teacher preparation design at this stage. Rajasthan Vidhyapeeth, Dabok, in Rajasthan shows keen interest in this area and offers B.Ed course of study in Child Development with the components to become a primary teacher. At the moment the Vidhyapeeth is involved in designing a four-year teacher education programme.

Such instances involving the participation of the university system is not a common feature at this level of teacher education. The prevailing realities suggest that though we have **multiple models** of teacher education programmes, Certificate or Diploma programmes of study form the common acceptable path for attaining initial training. A two year study programme, in general, is essential to obtain such a certificate. However, there are instances where one year study programme is enough to get a certificate. Field realities unfold that there are states where pre-service training is in vogue but such a training is not an essentiality for the appointment of teachers (See table-2). The data paint a picture of differences on entry qualification, course duration and essentiality of training for appointment to the post of primary teacher. Initiatives taken to introduce two year course of study and enhance entry qualification to higher secondary certificate are quite visible. However, some of the states still continue with 10 year schooling as entry qualification and one year course of study. In certain cases pre-service training is not an essentiality for the appointment as a teacher. Well, there are indications that pre-service training is likely to become an essentiality in these states.

Table – 2: State wise pattern of pre-service training as an essential qualification for appointment of elementary level teachers (eastern region)

State	Essentiality of Pre-service training	Pre-service training entry qualification, Duration
Arunachal Pradesh	Yes	> Higher Secondary Certificate > Two Year
Assam	No *	> High School Certificate for Primary > Higher Secondary Certificate for Upper Primary > Two year
Jharkhand	Yes	> High School Certificate > Two year
Manipur	No	> Higher Secondary Certificate > Two year
Meghalaya	No*	> High School Certificate > One year
Mizoram	Yes	> Higher Secondary Certificate > Two year
Nagaland	No*	> Higher Secondary Certificate > Two year
Orissa	Yes	> Higher Secondary Certificate > Two year
Sikkim	No*	> Higher Secondary Certificate > Two year
Tripura	No	> Madhyamik (High School Certificate) for classes I – V. VI onwards graduates > One year
West Bengal	Yes	> Madhyamik (High School Certificate) > One year

Source: NCTE – Eastern Region, 2003(Provisional)

* Proposal for making pre-service training an essential qualification is under active consideration.

The field realities of various forms of pre-service teacher education and the process of implementation suggest certain **critical issues**. When the national norm stipulates Higher Secondary or +2 as minimum eligibility and a two year pre-service training, instances of **non-observance** of such norms or **situations** where pre-service training is not an essentiality for placement as a teacher, build up road blocks in reform efforts in nurturing and sustaining quality in professional practices. It is an issue that envelops the entire process of primary education and naturally seeks the attention of policy makers. Certainly, the initiative to set up DIET at the district level provides room for decentralized approach to plan and execute programmes in tune with the local context. However, several of them are neither fully or adequately equipped. Some of them even do not have access to adequate resources or facilities. Such **limitations** in staff and resources have a crippling effect in performing their pace setting roles. A critical look into the professional background of teacher educators in DIETs or pre-service teacher training institutions provides interesting insights into the prevailing pattern. Teacher educators with **secondary level teacher training** exposure (B Ed., M.Ed.) are engaged in the professional training of teachers at elementary stage. In other words, personnel with no formal background of primary/elementary stage of pedagogical practices are positioned to impart training to those who choose to become primary teachers. Further, those who complete primary teacher training course cannot become teacher educators at this level unless and until they complete B Ed. and M.Ed. courses of study from the university system. From the academic and professional perspectives this is a critical issue which needs to be professionally addressed. In fact, as a **strategy**, participation of the university system in the preparation of pre-service teachers in this area of schooling can be thought of. A four year course of study after higher secondary stage of schooling akin to the B.El.Ed. model, for instance, can be an alternative path for providing the essential inputs and space for shaping the much needed professionalism in teaching at elementary stage. Such a strategy provides channels for upward professional mobility. In fact, an integrated 4 year model with flexibility of course components where one has the option to choose either a primary teacher education or a secondary teacher education programme involving the university system can be thought of as an alternative form departing from the conventional form.

Reframing theoretical formulations in teacher education curriculum

The teacher education curriculum at this stage is woven around foundational disciplines, special components, methods specifying procedures for conducting lessons and prescriptions about how to address problems teachers confront in classrooms, and internship or teaching practice including practical activities. The prevailing frame is a scaled down version of the B.Ed. curriculum (Seshadri, 2003, P.210) The underlying premise of the curricular frame is that knowing precedes doing and action is a consequence of doing. It implies that the teacher trainees are given as much knowledge as we can before they get into the world of teaching. It is no wonder then to find dominance of theory in the teacher education curriculum. The issue of dominance of theory over teaching practice is critical from the perspective of professional development but let us focus on the nature of prevailing theoretical ideas. A critical look at the theoretical formulations available in the curricula, we notice two forms of deception (Khader, forthcoming). First, the theoretical ideas are provided in a superficially generalized form and the emerging ideas or new developments are rarely given space. The second deception focuses on the lack of effort to interpret classroom realities based on the theory. The stress here is on the integration of theories of pedagogy and classroom practices.

Let us turn to the first deception which underscores the space for emerging perspectives of theoretical ideas in curriculum. For instance, when we examine the **psychological principles** outlined in the curriculum we find, that the main ideas are centred on development, learning, individual differences, motivation, testing and so on. Woolfolk Hoy's (2000) analysis provides interesting insights into the gradual changes that take place on the content of Educational Psychology in tune with the developments in the field and also the needs of teachers for addressing the classroom realities. The current content shifts to individual and group differences, motivation and management, diversity, constructivism and psychology of school subjects demonstrate how the emerging ideas in the area of Educational Psychology are meaningful for the professional training of teachers. Likewise, treatment of basic concepts seeks a shift. The idea of teacher, for instance, is often treated in terms of the concept and the characteristics of a teacher. However, the treatment across time dimension from the historical perspective would provide a meaningful frame for reflection and understanding of the idea of a teacher within a social system. The ideas of guru and guru-sishya relationship are entirely different from the modern concept of teacher and teacher-

student relationship. Tracing the idea of teacher across time dimension – from guru to modern day teacher would provide a meaningful frame for understanding the concept and functions of teacher. Reflections on the image of a teacher, instead of a discourse on the qualities of a good teacher, can be a realistic path for the treatment of the concept of teacher. Likewise, when we consider the concept and process of learning, the curriculum invariably takes the behaviouristic perspective. Emerging ideas of cognitive perspective with the focus on constructivism are rarely visible. In fact when the teacher educators unfold the concept of learning based on modification of behaviour, they need to move further to the idea of structuring and restructuring of cognitive structures resulting from a learner's active processing of information. Further, the lesson plan format based on behavioural objectives is built on behaviouristic tradition. The curriculum needs to move further giving space to emerging ideas like constructivism. Constructivism implies that learners actively construct their own knowledge by linking new information to the existing knowledge on the basis of experience. The thrust placed here is on mental actions of the learner, process of learning, doing activities, interactions and collaborations, multiple perspectives and construction of knowledge. Similarly, emerging evidences on teacher cognition and teacher behaviour, though at nascent stage and in fragmented form, underscore the relevance of reflections on the images (Elbaz, 1983, Calderhead and Robson, 1991), personal theories (Carter, 1990) and practical knowledge (Fenstermacher, 1994) formed by the teachers in the teacher training programme.

Likewise, emerging ideas of social theories are useful tools for professional development of teachers. For instance, when we consider inequality in teacher education we notice that the concept is considered from the view of modernism. We need to move further from modernism to post-modernism and engage in dialogic approach, if we are serious about the preparedness of teachers to address the issues of inequality objectively in a multiethnic society. Flecha (1999) points out that modernism presumes that different cultures or ethnic groups have unequal levels of intellectual, political and economic progress. The underlying assumption is that ethnicities or cultures are either superior or inferior. It means that minor ethnic groups are inferior to dominant ethnic groups and the former needs to imbibe the values or cultural patterns of the dominant groups. Post-modernism rejects the assumptions of modernism by stating that ethnicities or cultures are neither inferior nor superior they are simply different. It implies that the cultural patterns and values of each ethnic group is equally important and each has equal rights. Flecha advances the dialogic perspective for

creating conditions that allow people from different ethnicities to live together. Dialogic perspective focuses on the need for opening dialogue between different ethnic or cultural groups in order to establish common rules for living together in the same territory. The difference is simply part of equality, the equal right of everybody to live differently. In fact, such a treatment of the concept would help in seeing the interconnections of diverse social groups, school system, inequality, equality and living together, and sharpen the mindset of teachers in understanding the dynamics of society and the underlying rationale of the idea of living together, and interpreting the school practices meaningfully. Further, recognizing the postmodern view of curriculum provides professional meaning. Macdonald(2003) points out that a postmodern curriculum views learners as knowledge producers rather than knowledge consumers and the learners ability to organize, construct and structure form the critical point in the curriculum

Student diversity is yet another aspect that seeks deeper understanding. Today, critical perspectives hold stronger place as legitimate ways to think about such concerns Perspectives derived from critical theory, critical pedagogy and feminist theory such as empowerment, diversity and equity have major consequences in school practices. These perspectives find space in teacher preparation programmes marginalizing the core aspects of critical theory For instance, diversity has come to mean giving special attention to groups characterized as everything from low socio-economic status groups to talented or slow learners Critical theory's concern with equity originally limited to class, gender and later extended to other disadvantaged and non-dominant groups, are diminished in this broadening. It implies that broad – based notions of equity avoid hierarchy of differences or do not meet the structural concerns for equity that are characteristics of critical theory and instead, it relies on individualistic notions of maximizing potential (Gore, 2001) When class, gender and disadvantaged are subsumed under broad categories along with talented or group with learning difficulties, the term becomes meaningless and is subjected to superficial treatment. Critical theory can help in understanding how educational ideas, policies and practices shape human consciousness and how they are related to larger political and ideological perspectives and social realities. Understanding and analyzing the linkages between day-to-day practices in schools and larger domains and values that are often linked to social and political realities is central to the treatment of critical theory for teacher education and teaching In the context of teacher education, critical theory focuses on social dimensions and their consequences for educational practices, ideological meanings of texts and experiences, power relations in

schools and other institutions and the need to integrate theory into practice in new ways. Such an approach is vitally important when we ask to what extent schools serve learning by all children equally well or do the schools hear previously marginalized voices and empower all such children. Critical theorists often look into ways in which classrooms provide for mechanisms that are injurious to the students who are marginalized. They also look at the ways in which teachers can develop activities and modes of interaction that work for social justice and toward social change.

Beyer's (2001) initiative in formulating course component in teacher education programme at elementary stage from the perspective of critical theory seeks attention. The programme called Democracy, Diversity and Social Justice (DDS) is designed on the need to help prospective teachers instruct students with diverse backgrounds, cultures and learning abilities. The core components involve commitment to enquiry projects and frames of mind, democratic communities, ideas and practices, critical reflection on experiences and actions, and a comprehensive understanding of social justice. The framework has the potential to integrate issues of class, gender, race, disability, sexual orientation etc. so that prospective teachers can see how these various issues are connected and how the forms of inequality represented may build on each other. Moral and political issues related to teaching, curriculum and inquiry assignment are also given adequate space. Classes and field experiences are created to help the prospective teachers understand the problems associated with inequality and how these problems can be used to raise the consciousness of school students. Emerging perspectives in social theories further point out the essentiality of critical reflection in teacher education (Brookfield, 1995; Loughran, 2002). Critical reflection enables prospective teachers to develop the habit of continuously learning from their experiences by framing problems of practice in the light of multiple perspective, critiquing and referring problems within broader sociopolitical and moral perspectives and initiating action that is informed by such reframing. For instance, interaction with teachers and facilitators and readings on culturally relevant curriculum, a teacher trainee may reframe the view of a student for whom the curriculum is irrelevant or culturally unresponsive. Such reframing may help a teacher trainee to use his/her knowledge about the students' lives to design instruction that builds on what they already know while stretching them beyond the familiar (Villegas and Lucas, 2002).

The foregoing paragraphs illustrate that emerging ideas in Educational Psychology and social theories have major consequences for theoretical formulations in teacher education if the concern is to develop professionalism in teaching and empower teacher trainees to address the classroom realities in a social context (Khader and Panda, forthcoming). It is meaningful to reframe the theoretical ideas based on an interdisciplinary perspective. What is striking is the fact that the emerging ideas are advanced by scholars or practitioners based in centres of higher learning or universities. The critical issue is that in the absence of involvement of the university system in the teacher education programme at the elementary stage, how do we reframe the pedagogic theories embedded in the teacher education programme at this stage. Further, is it feasible to adopt an interdisciplinary perspective for reframing the pedagogic theory? Obviously, we need to reflect on **strategic** initiatives like initiating a dialogue with the university group to address this issue. Certainly, it is not based on a top-down approach, rather involving both bottom-up and top-down approaches can be helpful in initiating dialogues.

Restructuring field experiences

Field experience reflects the centrality of practice to indicate the contribution that pre-service teacher education provides for professional development. Field experience provides the opportunity to involve in the process of teaching reflectivity and building professional experiences, and view the theory in action. In fact field experience serves as a lens for viewing how the theory works. Pre-service teacher education curriculum built on theory and practice, often makes the distinction between them more visible. A close look at the teacher education programme in the state of Orissa, for example, reveals that the teacher education course is spread over 14 components where 12 deal with theory and 2 on practical aspects specifying teaching practice and project work. It also specifies the time slot for each of the components. The course allocates around 78 percent marks for theory and 22 percent for practical – 15 percent for teaching practice and 7 percent for project work. In the case of Haryana, Seshadri (2002, P.210) points out that the prevailing course sets apart 58 percent marks for theory, 29 percent for practical and a mere 13 percent for teaching practice. Both instances depict field reality- the dominance of theory in the pre-service teacher education programme. The same trend can be seen in other states too. The prevailing trend suggests what Doyle and Carter's (2003) view of front-loading in teacher education curriculum meaning that teacher trainees are given as much theory as they can before they get into the

ld of teaching. In the context of such a trend they point out that any initiative to reform teacher education is likely to end up increasing this upfront loading, as if a teacher will never have a chance to learn later.

The prevailing model tells that theoretical orientation of teaching would be followed by teaching practice. The basic premise is that theory unfolds practice suggesting first theory then practice. During teaching practice the trainees engage in the construction of lesson plans based on the prescribed format-steps, activities, summary and so on, delivery of the lesson, instruction and use of aids, and performing specified project work. In this exercise the teacher trainees often overlook the process of teaching and the theoretical constructs behind the pedagogical decision making; instead they get preoccupied with procedural concerns of time management, teaching the expected lessons and content, and classroom management (Moore, 2003). In fact, field experiences stress on the centrality of practice suggesting that the teacher trainees need to utilize each classroom situation to practice instructional decision making and reflective practice. However, the focus of practice teaching often shifts towards procedural concerns and routine tasks (Fuller, 1969, McBee, 1998). Pre-service teachers learn several teaching strategies-problem solving, enquiry, discovery and so on but they do not learn how to discover or construct the specific situations occurring in everyday life. This position necessitates a shift and urges to recognize the essentiality of the treatment of teacher education programme from the development perspective. This perspective views that the trainees through the teacher education curriculum gradually build up the competencies for instructional decision making and reflective practice and grow up to perform professional teaching. This entails professional learning which means study of practice, analyzing and discovering courses for action and identifying possible alternative actions (Sullivan, 2002). Visible actions on the part of teacher educators and responses from teacher trainees form essentialities. Not only the orientation for reflection and change is necessary, but building up an awareness of a need to think and grow is equally important. The significant point is the transformation from novice to a position of performing professional role of teaching. The transformation implies change and the process of transformation, obviously, would reflect the nature of resultant change. For example, if the process of teacher training is rooted on transmission of knowledge, the teacher trainees invariably traverse the same path (Khader, 1996). On the other hand those who are guided through reflective practices follow such a course of action. The development perspective rooted on constructivism underscores instruction through active involvement, interactions and collaborations, multiple

perspectives, and reflection and reconstruction. This unfolds that we need to move out of the prevailing form of teaching practices.

As a strategy to address the prevailing trend, Korthagen and Kessels(1999) point out the need for integration of pedagogic theory and practice in such a way that it leads to integration within the teacher. Their argument stresses on the need for departing from the traditional application of theory model in practice. They point out that quite often pedagogic theory is described as epistemic knowledge or general conception applicable to a wide variety of situations. Use of such knowledge in teaching becomes a complex task unless the trainee has developed competencies. For instance, let us consider a classroom situation where a learner is encouraged to use prior learning as a scaffold for new learning. In such a situation the teacher trainee needs to have the cognitive ability to respond to the kind of prior knowledge the learner brings to the scaffolding process. In their integrated framework, Korthagen and Kessels take a holistic view of describing the relationship between teacher cognition and teacher behaviour to a three level model – the Gestalt level, the schema level and the theory level for learning about teaching. For instance, let us consider the situation where a learner gives wrong answer to a question on, say, weather condition. The teacher reacts by saying, “that is wrong” then tells the right answer and goes on with the work. Here, the teacher does not make an attempt to discover the way the learner arrives at the answer meaning that the learner is likely to continue with the mistake. They point out that the teacher’s reaction can be seen as the result of a chain of perception, interpretation, logical thinking, decision making and acting, and all these take place in quick succession. Together they form a unity rooted in conditions such as earlier experiences of teacher’s life as a student or observation of mentor teacher how he/she reacts to students or the thinking that the learner may resist if asked to reflect on his own thinking or the teacher’s desire to complete the overloaded curriculum. Unity of such conditions is neither rational nor is the teacher conscious of it. In such a situation Korthagen and Kessels use the idea of Gestalt to interpret the situation. Gestalt means holistic perception of objects or situations as an entity. Multifaceted conditions and events embedded in a given situation are combined in one holistic perceptual identity. It implies that the reaction of the teacher can be seen as unity formed from the complex interplay between social, cultural and psychological factors. Besides, using the principle of closure they explain the teacher’s reaction. Closure implies the tendency to perceive a whole picture in a number of scattered or broken parts by bridging the gap perceptually. It means presenting the right answer by the teacher (by ignoring the

existing gap in the learner). Korthagen and Kessels point out that if the teacher reflects on his/her own Gestalt in this situation and discerns what guides one's own thinking, he/she may become aware of the elements that constitute his/her Gestalts and the relationship between the elements. The teacher can, then, form his/her own schema, leading finally to the theory level. What emerges from this analysis is that the integrated framework paves the path for instilling professionalism in teacher training and teaching.

The framework begins with realistic meaningful practices from the field in which pre-service teachers are actively involved, instead of starting with teaching of educational theory in the classroom. When moving from practice to theory to create a knowledge base, theory is considered more situation specific. In the situation specific study of theory, situated knowledge is developed through the interaction of the trainee with the problem situations and the concrete situations remain the reference points during the learning process. Such an approach provides the trainees with a frame of reference for pedagogical decision making, different from what they develop in more traditional programmes. The main issue that confronts us is, should we remain silent partners and perpetuate the prevailing theory dominated transmission models of teaching practice or do we actively recognize the essentiality of development perspective with the focus on constructivism in the formulation of teaching practice. Integration of pedagogic theory and practice can be a meaningful strategy. Obviously, this invites a paradigm shift in teaching practice at the primary level pre-service teacher education programme

Relevance of Information Communication Technology (ICT)

The growing relevance of Information Communication Technology has major consequences in the field of education, particularly in the context of pre-service teacher education at primary stage. ICT has gained roots in several institutional systems engaged in the production of professionals. The way professional education exploit ICT for imparting course programmes provide enriching experiences and help students leap forward. Of course, technology alone does not produce learning. It is a tool that can be used in many ways with profitable results. Considering the magnitude of its effectiveness for performing professional functions, it is a logical and professional necessity that we employ ICT for effective execution of teacher education programmes.

ICT provides several options. We can use a suitable software to demonstrate cloud formation. A teacher educator may give trainees situations to use technology to facilitate learning or may ask them to make a presentation using Microsoft power point or expose them to internet to access information and materials, to research and to prepare lessons Educational CD-ROMs and spreadsheets have opened new avenues for use of technology in the classroom. E-mail has emerged as an effective tool for teachers to communicate with people. In fact, technology provides channels for preparation and delivery of lessons, teacher directed student learning, job related e-mail, recording grades, creating a database of students and school and so on. Teachers often use technology in general form (e.g. e-mail communication, gathering information and materials) rather than focusing on specific use for strengthening professionalism. If the technology taught in teacher training is of a general nature it does not promote professional development. It is prudent to focus teacher preparation on specific forms of technology (preparation, delivery, student learning, developing activities, e-mail, etc.). Chartering a technology integrated curriculum provides the right channel for teacher development (Russell, Bebell, O'Dwyer, and O'Connor, 2003) This is more so when we notice that many teachers are familiar with technology but may not be grounded well in applications of technology in the classroom. Obviously, the thrust needs to be placed on integration of technology in classroom. Teacher trainees' attitude toward technology assumes meaning in this context A suitable strategy to shift teacher trainees' attitude toward technology is to provide them with the opportunity to work with technology. Teacher training curriculum oriented to new pedagogy- constructivism, activity centric strategies are more fertile to engage in technology use than those curricula woven around conventional pedagogy

In fact, computer based technology can be employed in three ways in teaching and learning. They consist of application of ICT in teaching and learning, learning about technology (knowledge of hardware and software) and learning with technology (learner controlled and interactive). We need to focus on **learning with technology** in a **constructivist** environment where instruction and learning are formulated based on constructivist perspective. For instance, a software on cloud formation can be an effective tool for teacher trainees in constructing instructional skills. The software based on simulation provides concrete situation to generate cloud, manipulate temperature and vapour pressure to cause rain. The situation provides for constructivist environment for instruction and learning Further, online collaborative consultation is an effective strategy for gaining practical and

professional support to teacher trainees and teachers. Online support provides channels for collaborative consultation in which experienced facilitators provide support through problem solving process. Collaborative consultation has been found to improve teacher's problem solving skills, facilitate understanding of and attitude towards children's problems and promote gains in long term academic achievement (Meyers, 1995). The ideas of collaborative consultation and peer support grounded in theories suggesting that personally meaningful knowledge is socially constructed through shared understanding (Vygotsky, 1978), the concept of communities of practice from situated learning research (Lave, 1991) and the concept of meta cognition (Garner and Alexander, 1989). Online collaboration facilitate teachers to discuss and clarify their thinking and make informed decisions about the professional difficulties with the support of the facilitators. Dewert, Babinski and Jones's (2003) study on online collaborative consultation for beginning teachers provide interesting insights in this context and it is worth citing. The study focuses on online collaborative support to beginning teachers. One of the problems teachers sought to address is retention. One teacher finds six children with learning disability in the first grade and feels that they may not gain in the next grade and also finds it difficult to retain all of them. Another has two children who are below average in reading and writing. Yet another, a middle school teacher has added another dimension to the retention problem. She has five students who have already been retained once and still do not show signs of improvement. Through online collaboration, the facilitators- experienced teachers and university faculty members- questioned the use of retention as a form of punishment challenging the teachers to think more deeply about the factors that should be considered in retention decision. Through collaborative exchange of stories, questions, opinions and research information, the new teachers started constructing their own understandings of retention. One university faculty member wrote that retention is not an intervention and is not likely to improve student learning. Such students need other than standard curriculum to experience success. Another faculty member communicated that retention could be alleviated with year round schools and non-graded or multigraded classrooms. The year-round school schedule provides intervals for extra help to those who need more time. Multigrade classrooms allow a child to spend two or more years meeting competencies. With online collaborative support the new teachers moved from a compliant position of received knowledge (applying other's knowledge uncritically to survive) to another position of self constructed knowledge and action. The study indicates that an online support community is an effective means of providing social, emotional,



practical and professional support to beginning teachers. Collaborative consultation provided scaffolding to beginning teachers as they constructed their understanding.

The study illustrates the opportunity online support provides to teachers to clarify their own thinking on the issues and problems, and make more informed decisions on their own students educational experiences. It also underscores sharing of information and multiple perspectives in addressing the problems confronted by the teachers. In fact, technology is a powerful tool within the **constructivist perspective** and paves the way for professional development of teacher trainees and teachers. However, there are critical issues that seek serious attention. Teacher educators at the primary stage may be open to technology in the pre-service training of teachers. The critical question is, when the teacher training institutions are inadequately staffed and face resource crunch, how do they switch over to training with technology. Besides, primary schools too lack adequate teachers and resources particularly in rural and far flung areas. We still continue with single teacher schools. The issue gets confounded when we consider those schools with inadequate staff and less resources which the children of low social origin attend. We may also confront the situation resulting from the negative impact of technology i.e decrease in the quality of writing. How do we address these issues?

Setting norms and standards

The various reform efforts in the field of education invariably focused on the quality of pre-service teacher education. Reforms stressed on the mechanisms of recognition of teacher training institutions, and maintaining the standards and norms of teacher education programmes. The establishment of National Council of Teacher Education (NCTE) in 1995 as a statutory authority through an Act of Parliament for achieving planned and coordinated development of the teacher education system throughout the country, and for the regulation and proper maintenance of norms and standards in the teacher education system is a turning point to ensure quality. The NCTE is vested with both regulatory and academic functions of providing resource support for the qualitative improvement of teacher education programmes. Under this statute it is now mandatory for teacher education institutions to seek the recognition of NCTE. The NCTE has taken the initiative to lay down the norms and standards for primary/elementary teacher training institutions. The preamble states that the elementary teacher education programme is meant for preparing teachers for elementary schools

(primary and upper primary/middle). Norms and standards cover course duration, size of intake, entry qualification, teaching days in a year, curriculum transaction and requirement of teaching staff, qualifications of teaching staff, size of administrative staff, terms and conditions of service staff, infrastructural facilities and financial management. Apart from setting norms and standards, the NCTE is actively involved in periodic review on the basis of feedback from the field and accord recognition to institutions through its regional centres.

Another area where the NCTE has to involve in critical decision making is the content and process of teacher education curriculum. The recent effort in developing a **curriculum framework** for teacher education suggests multiple models for elementary stage (NCTE, 1998) Recognition of the constitutional provision of providing free and compulsory education to all children up to 14 years of age covering primary and upper primary suggests three possibilities of course design:

- an exclusive teacher education programme for primary stage (I-V)
- teacher education programme for elementary stage (covering I-VIII)
- exclusive teacher education programme for upper primary stage (VI-VIII)

Considering the field reality the NCTE suggests two alternative curricula – one for primary and the other for elementary. However, regarding upper primary, it is suggested that after completion of primary teacher education programme one may opt for credit oriented course. The suggested framework for both options are woven around theory, practice teaching and practical work. These initiatives have helped in **regulating teacher training institutions** and in gaining significant control over the form of functioning. Of course, the gains are confined to structural features (staff strength, duration of course, facilities, etc). However, there are areas of **weak spots**. A series of state specific studies initiated by the NCTE to assess the status of teacher education programmes reveal startling evidences outlining the field realities. Evidences point out non-observance of norms with regard to minimum academic qualification for entry into training and the duration of training. Instances of non-observance of norm of 50 percent marks for minimum eligibility to the training course are also visible. Absence of compulsory requirement of pre-service training for

appointment of teachers and the practice of placement of untrained teachers is being followed in certain states. There are instances where teachers with B.Ed. qualifications are placed in primary schools even though candidates with primary level teacher training are available. There are states which are yet to revise primary stage teacher education curriculum in tune with the NCTE curriculum framework. Despite such roadblocks, following the earlier initiatives aimed at qualitative improvement of teacher education, the NCTE has recently suggested a framework for the **process management** of elementary teacher education curriculum (NCTE, 2003). The framework is built on five broad components-general education courses, pedagogic courses, school experience, practical work and internship. It suggests several ways of professionalising teaching of theory courses and organization of school experience programme. The significant point is that practice teaching is replaced by school experience and post-course work internship becomes an essential component of pre-service teacher education programme.

In the context of non-observance of stipulated norms in teacher training and in the selection of teachers, how do we ensure and sustain quality in teacher training and school practices. The norms on the process management of teacher training curriculum are yet to become reality. These issues are complex in nature and need to be reflected and addressed by evolving pragmatic strategies with state participation.

Professionalism of educators

Professional roles that have been glowingly painted depict the image of a teacher as one who is empowered with interactive communication skills, expertise in IT, subject specific competence to manage learning groups, pedagogic competence to address content specific learner needs, competence to design teaching-learning materials, initiative in mobilizing resources, competence to research and innovate, mastery over objective assessment mechanisms, relevant competence to mould learners to live together in multicultural settings and the like. A discerning eye can sense the complex set of skills enveloped in each of them and of course, the prevailing interlinkage among them too. Further reflections on the components of professional image underscore the essentiality of a teacher to shift from the position of a generalist to the position of a professional. Obviously the teacher needs to enrich himself or herself with the essential competence to address the new challenges. The implications for the teacher educator and teacher education programme are quite obvious

Unless the teacher educators initiate actions for change in teacher education curriculum and the professional practice of such a curriculum, the expected professional image does not become a reality and the teachers would continue to carry on their performance in the same form and style. It means that the change should originate from teacher educator and flow down to the teacher through curricula practices. Critical role of teacher educators and teacher education programme assume meaning in this context. It is not surprising to find a correspondence between what the teacher educators do and what the teachers practice. If the teacher educators choose to traverse a knowledge oriented path, then it is unrealistic to expect the teachers to choose a different path. Such a relationship between teacher educators and teachers in the professional field assumes critical meaning in the context of a reform for teacher's professional development. The premise is that effectiveness of professional development of teachers is contingent upon the actions initiated by the teacher educators that set in motion the change process to attain professional development. Interestingly, when a reform in teacher education is set in motion, teacher educators without effecting change in their professional practice prescribe change for teachers as if it is meant only for teachers. The underlying implications of curricula practices for teacher educators are neither suggested nor followed. The fact is that like the teachers who are required to re-learn their practice in tune with the reform, the teacher educators too are required to re-learn their craft (Khader and Das, forthcoming).

In fact, when the teacher educators reformulate teacher education curriculum, they need to understand the key concepts and ideas. These concepts and ideas provide a theoretical grounding for the policy on teacher education as well as a set of design features for actual development of teacher education curriculum and its implementation. They need to understand the deep political and knowledge-based challenges of their role and simultaneously change themselves to accommodate the new curriculum practices in their professional practice. When we consider the implementation of teacher education curriculum, the attention focuses on teacher educators. Teacher educators or their professional practices are yet to seek the attention of researchers. Lanier and Little (1986) opine that teachers of teachers are typically overlooked in studies of teacher education. Likewise, reforms invariably specify the guidelines on the professional role of teachers but such specifications are rarely found for teacher educators. However, the recent reform effort in South Africa suggests, seven roles for educators (Robinson, 2003) and they consist of -

- mediator of learning
- interpreter and designer of learning programmes and materials
- leader, administrator and manager
- scholar, researcher and lifelong learner
- community, citizenship and pastoral care
- assessor
- learning area/subject/discipline/phase specialist

The above seven roles and a set of associated competences grouped under practical, foundational and reflexive competences form key organizers for the design of teacher education programmes. What is significant in the context of reform is change. But the change cannot be mandated, that it is non-linear and loaded with uncertainty (Fullan, 1993). The crucial point for change rests in teacher educators. They need to develop a **sense of identification** with the policy and understand their own experiences of the process of policy implementation. Reflection on the experience through the process of quality assurance of teacher education is important. **Quality assurance** relies largely on internal evaluation and is structured through a cyclic process of reviewing, reporting, taking action and re-planning. When we consider experience in implementation, teacher educators' personal engagement in implementation, professional interaction, (critical practitioner inquiry as a strategy for improving practice and empowering practitioners), systemic support (financial and human resources, opportunities for training and follow up support, communication networks and local support) and environmental context form the key components to get into the depth (Robinson, 2003).

The implication is that teacher educators need to fine tune their mindset and practice, and set in motion the change process for professional development through **experiencing policy implementation**. For instance, Stein, Smith and Silver (1999) view that if professional developers are to be effective in supporting the transformation of teachers, they too must undergo shifts in their knowledge, beliefs and habits of practice that are akin to transformation than to tinkering around the edges of their practice. Based on the experiences from Mathematics reform, Stein, Smith and Silver, further point out that professional developers need to know how teachers learn within organizations and through interactions with others, and they require not only access to a variety of strategies, but also to have the ability to gauge which strategy will be most effective with a given set of teachers. in a given setting. Obviously, teacher educators need to shift their thoughts, beliefs and habits of professional practice to keep pace with reforms. In reality, often it does not happen. The

question that arises who can teach the teacher educator is as good as asking who can lead a leader. The critical issue is that shift in the professional practices of educators in tune with the curricula reform is an essentiality. But how do we effect the shift in the thoughts, beliefs and habits of professional practice of teacher educators.

Summing up

In this module we tried to map out the current perspectives, emerging issues and the related strategies in primary level pre-service teacher education programme. We started by exploring national initiatives for quality. Then moved on to forms of pre-service teacher training, reframing theoretical formulations, restructuring field experiences, relevance of ICT, setting norms and standards and finally to professionalism of educators.

Activity

Critically examine the pre-service teacher education programme that you follow at home and state the change perspective that is needed, as well as identify the emerging issue and the related strategy in respect of :

- Pedagogic strategies
- Norms and standards of teacher training
- Professionalism of teacher educators

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